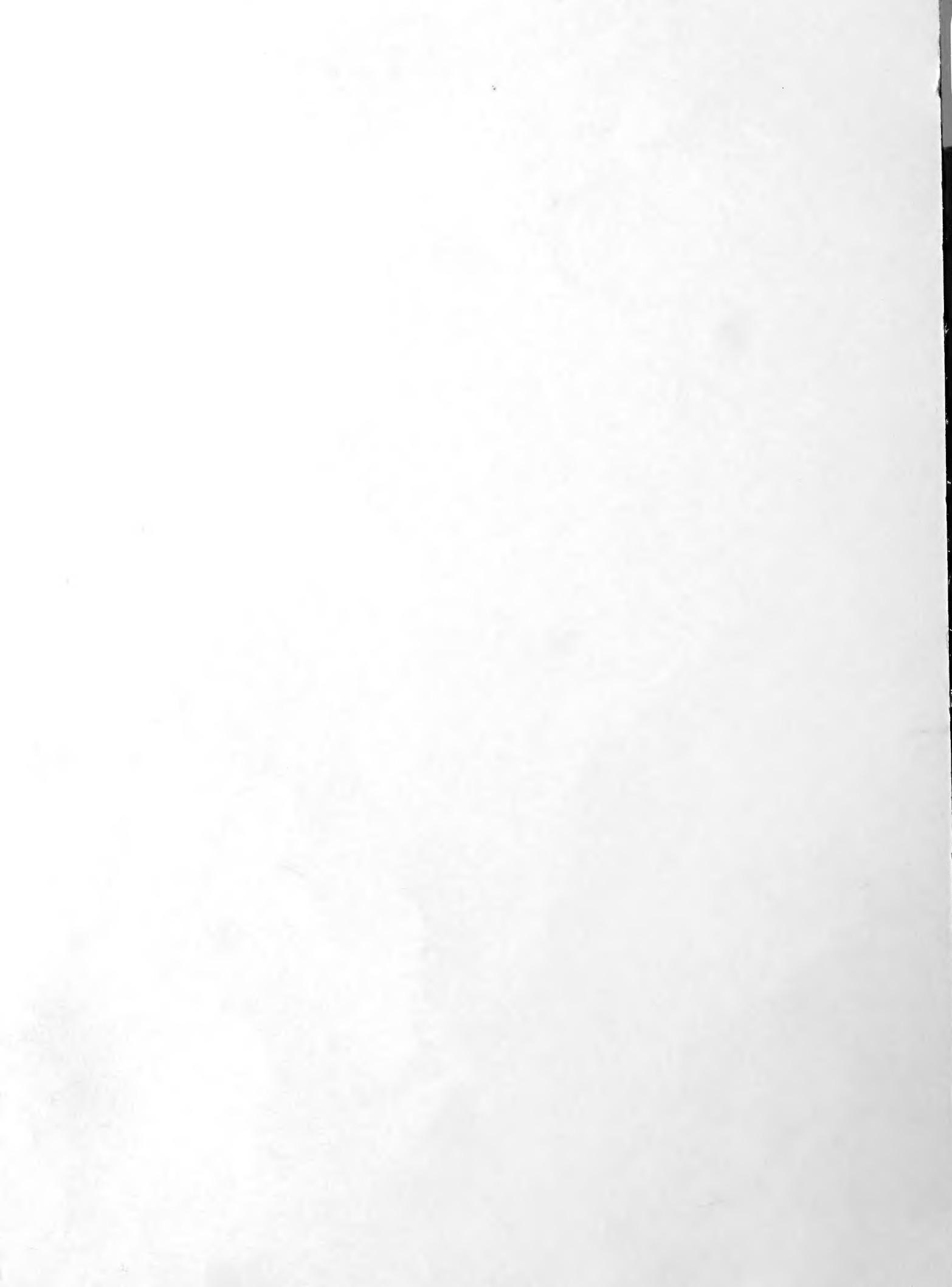


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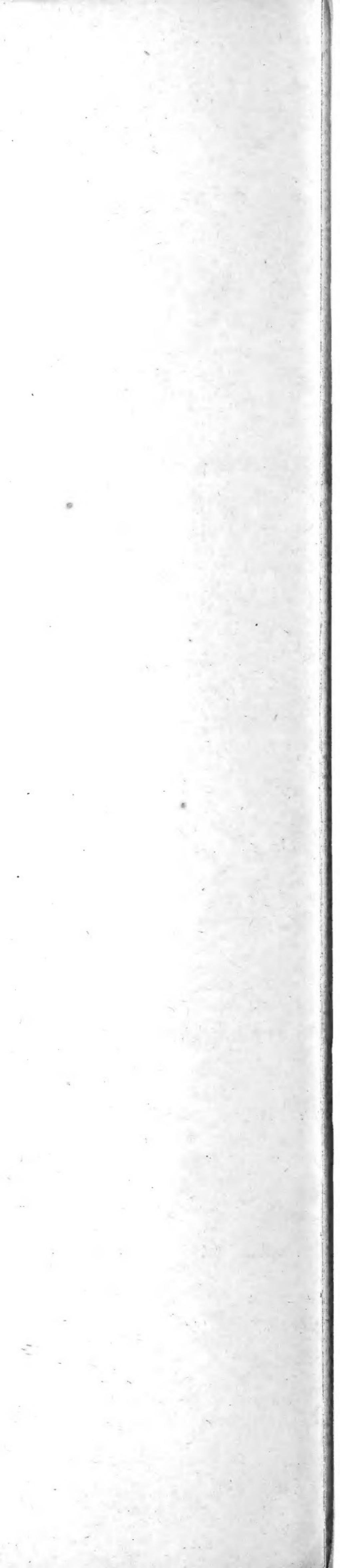
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CHRYSANTHEMUMS

AN AUTHORITATIVE ARTICLE BY

Alex Laurie

PROFESSOR OF FLORICULTURE
OHIO STATE UNIVERSITY

The popularity of the chrysanthemum has made it a universally grown crop. Practically every grower of miscellaneous flowering crops includes the chrysanthemum in his program of rotation. Unfortunately the comparative ease of culture of this crop results frequently in neglect and sloppy methods. With competition becoming greater in the post-war period, quality becomes essential and to produce quality the chrysanthemum should not be treated as a step-child and given inadequate care. Lack of attention to stock plants, untimely propagation, use of weak cuttings, hardening of plants before benching, allowing insects and disease to become rampant, growing plants to too many stems, bunching improperly and handling the cut stock roughly, are some of the glaring inadequacies of culture • • •

SOILS

A fibrous soil, well aerated by having granular structure and adequate amounts of organic matter, is necessary. The use of manure or peat at the rate of at least one-quarter by volume is desirable. Extremely heavy soils are benefited by inclusion of fine cinders (less than $\frac{1}{4}$ inch) or even sand together with the organic matter.

Acidity

Since chrysanthemums do best in slightly acid soils, additions of lime are not recommended except in areas where extreme soil acidity exists. However, calcium is often low and in that case in slightly acid or neutral soils gypsum or calcium sulphate could well be added at the rate of 2 lbs. to 100 sq. ft. If available soils are alkaline an application of sulphur at the rate of 2 lbs. to 100 sq. ft. will be found desirable. Since, however, this material is a slow acidifier, it should be added several weeks in advance of planting. A pH of 6-6.5 is best.

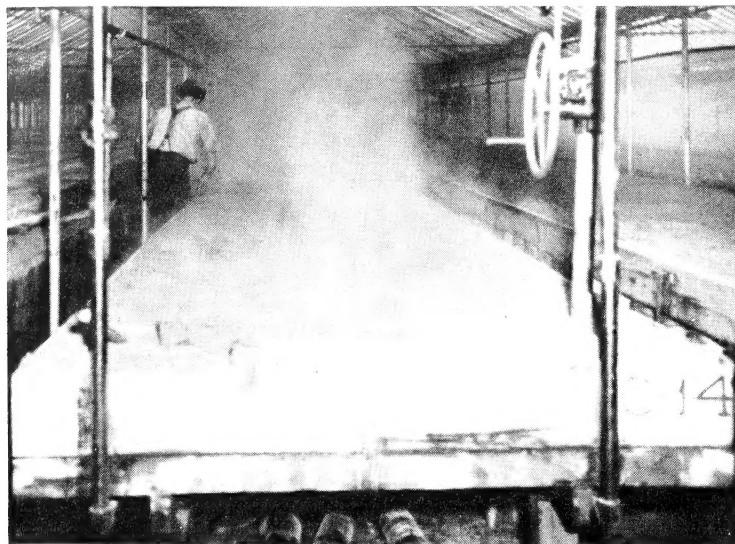
Levels of Nutrition

If soils are tested and they really should be, the following levels in parts per million (do not confuse these with pounds per acre) should be maintained:

nitrates 10-25, phosphorus 5, potassium 20, calcium 150. It is well, however, not to have the nitrates high at the time of benching—10 p.p.m. is more than adequate then. High nitrates at the start check growth and are frequently responsible for the yellowing of foliage and stunted appearance. Heavy leaching in well drained soil will correct such a condition. Usually superphosphate should be added (5 lbs. to 100 sq. ft.) at the time of soil preparation to insure a proper distribution of that material since surface applications are ineffective for a long time. For a short time crop, such as the chrysanthemum, slowly acting bone meal could well be eliminated from consideration.

Steam Sterilization

In this connection, it may be well to state that there is no necessity for the complete removal of soil from benches or beds every year. If the old soil is free of disease, its rejuvenation may be accomplished by the addition of one-fourth of the volume of peat and manure. This addition may be made at the rate of two-thirds peat and one-third well rotted manure. However, it is absolutely important that such soils be sterilized with steam. This serves a dual purpose. It destroys the verticillium wilt fungus and at the same time betters the structural con-



Practice regular soil sterilization.

CHRYSANTHEMUMS by ALEX LAURIE

Continued

dition of the soil. Steam sterilization may be done with 3-inch tile, downspouting with holes punched every six inches, or with 1½-inch pipe laid in sections. This equipment may either be buried in the soil or else laid on top, especially in shallow benches. A covering of canvas, building paper, or any impervious material is essential in either case to prevent the steam from escaping into the air instead of penetrating the soil. Concrete benches should have the sides covered as well to avoid cracking from uneven expansion. At 30 pounds pressure, approximately one hour is required to bring the temperature of the soil to the necessary height of 160-180° F., provided that not more than 50 feet is sterilized in one direction. By placing a split header in the center of a 100-foot bench and sending the steam 50 feet in both directions, 100 feet may be done at a time. After the desired temperature has been obtained (use a thermometer), the covering may be left on for another 30 minutes and then removed.

Steam soil sterilization eliminates most soil pests such as nematodes, symphilids, worms, sow bugs, etc. It is to be preferred to changing soil both from the standpoint of control of pests and diseases and the actual betterment of growth. In addition it saves labor.

Fig. 1. Overdose.



FERTILIZERS

Having applied the superphosphate and calcium if needed, either in the form of lime, if soil is acid, or gypsum if slightly acid or neutral, the balance of nutrients in the soil may be maintained by soil tests. Usually, however, two or three applications of a complete fertilizer (4-12-4) will be adequate, made after the plants are established in the bench and until color shows. All commercial fertilizers should be used at recommended rates (4-12-4 at 4 lbs. to 100 sq. ft.) and applied when the soil is moist.

Excesses

Too much nitrogen causes poor growth and development of bright yellow leaves at the top of the plant. The nitrogen can only be removed from the soil by leaching and several heavy waterings may be necessary for this purpose. Incorporating chopped straw into the soil will reduce the nitrates, by the action of micro-organisms decomposing the straw.

Excess phosphorus is rarely encountered. Too much potash burns the roots and is evidenced by browned leaf margins. Excessive calcium or lime causes the soil to become alkaline, and some of the elements become unavailable. To counteract alkalinity use sulphur at the rate of 2 lbs. to 100 sq. ft., or iron sulphate at half that rate. (Fig.1.)

Deficiencies

Lack of nitrogen causes the tops of the plants to lose their dark green appearance and the lower leaves to turn yellow, then brown, and cling to the plant. Lack of phosphorus causes the stems of the leaves (petioles) to turn purplish and in severe cases the veins of the leaf turn purple. Deficiency of potassium causes marginal browning of the lower leaves. This deficiency is similar in appearance to the burn from nicotine sprays or fumigations and confusion of the two is common. Either muriate or sulphate of potash at 1 pound per 100 sq. ft. corrects potash deficiency.

MULCHES

To maintain uniform moisture in the soil and increase growth, once the plants are established, a mulch may well be used. Peats are best, but manure, alfalfa hay, tobacco stems, spent brewers hops, may be used. In case of fresh, strawy manure or alfalfa an application of ammonium sulphate (1 lb. to 100 sq. ft.) should be made at the time of mulching or soon after to avoid check in growth due to the initial withdrawal of nutrients from the soil as the mulches decompose. This is not necessary when peat, tobacco or hops are used, because of their slow rate of decay.

CHRYSANTHEMUMS by ALEX LAURIE

Continued

PROPAGATION

Three to four inches of sharp sand that is well drained is the most satisfactory rooting medium. Steam sterilization of the sand prevents damping-off, stem rot, and infection from *verticillium* wilt. Three- to four-inch cuttings from stock plants should be firm and if soft enough to root rapidly removal of only a few lower leaves is necessary. Treatment with growth substances and bottom heat hastens rooting. Protection with paper or cloth the first few days prevents flagging. Cuttings should be rooted in two to four weeks. Potting the unrooted cuttings in 2½-inch pots in light soil (2 soil and 1 sand), covering with cloth, syringing frequently, is new but very successful. It saves one operation and plants so produced are soft and vigorous. No special attention is necessary other than syringing. Planting unrooted cuttings in the growing bench 8 x 8 inches is not recommended because of unsatisfactory results unless very closely watched. Do not propagate too early or the plants will become hardened between the time they are stuck as cuttings in the propagation house and the day they are planted in the bench.

Buying Cuttings

The trend now is to buy cuttings every year instead of attempting to carry over stock plants. There are a number of valid reasons for so doing. In the first place, few growers are either equipped or careful enough to produce *verticillium* free cuttings. This should be left to a specialist. Secondly, the space occupied by the stock plants could be utilized to better advantage. Third, propagation has to be done when you are busiest—in the spring. In addition, unless stock plants are given adequate care, some varieties will die out and you will be taking cuttings from the remaining ones, even though these are not the kinds you need to grow. Your balance of colors, seasonal cut, becomes disturbed. So in general, most growers have found it more economical and satisfactory to buy cuttings as they are needed.

YOUNG PLANTS

Rooted cuttings may be potted in 2½-inch pots or placed directly in the bench where they are to be grown. The potted plants may be allowed to grow enough to take a top cutting from them, but they should never be allowed to become hard and pot bound. (Fig. 2.) Loss of lower foliage upsets methods of pinching and such plants are hard and woody and require considerable time to develop new leaves.

PLANTING

The usual distance is 8 x 8 inches for standards, pompons, and disbuds. Greater distance on strong spreading varieties may be necessary. For stand-



PETE ROBERTSON (Right) of Yoder Bros., delivers a shipment of rooted cuttings for air-express shipment.

ards one plant per hill is recommended, and they should be pinched to give two or three stems rather than use two or three plants per hill. The plants should be set so that there is a dish in the soil with the stem in the center of the dish. This practice facilitates spot watering, which is recommended until the plants have become established. Syringing of the foliage prevents wilting and helps the plant get started.

For early flowering the plants should be benched by the middle of May. Mid-season and later varieties should be planted from the last of May until July 1, except those which are shaded. Plants to be shaded should be benched by June 1 in order that sufficient growth is made to give necessary height before shade is applied.

WATERING

Profits or losses are often determined by the man with the hose. (Fig. 3.) In the early stages spot watering around the plants is preferred to watering the entire bench. When the plants are well established, the bench should be given a heavy watering and this practice should be continued until maturity of the crop. When watering is done it should be thorough in order to insure wetting of all parts of the soil in the bench. The soil should dry in between waterings but the plants should never wilt. Steam sterilized soil requires more water than unsterilized soil. In steam sterilized soil the granulation of the soil permits rapid passage of water, and the soil in

Please turn to page 11

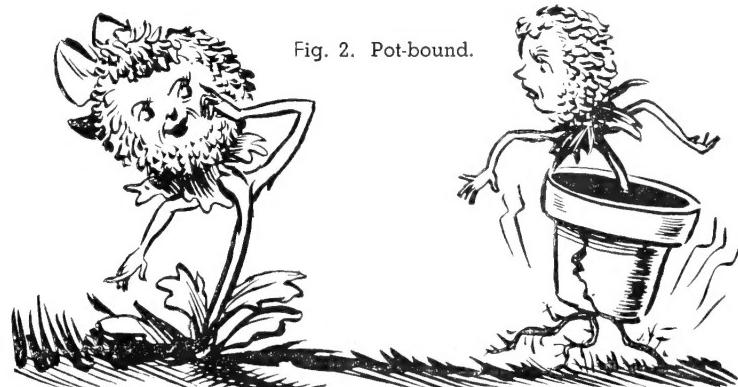


Fig. 2. Pot-bound.

WORTHWHILE NOVELTIES



IVANHOE

IVANHOE (Yoder Bros.)

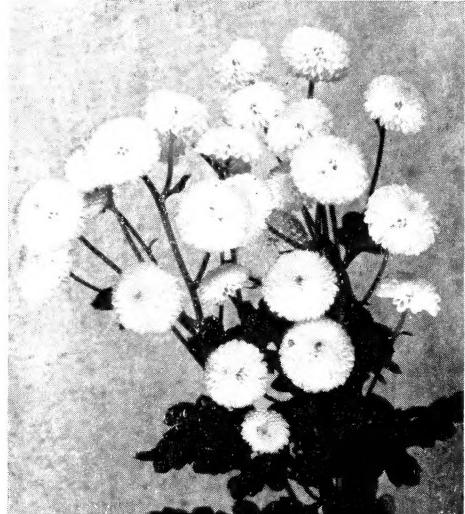
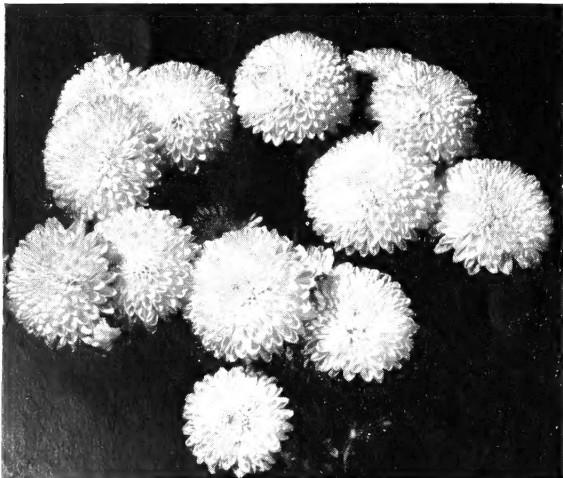
A small reddish bronze mum, especially suited for early cloth house culture. The flower is decorative in form, similar but more formal than Glitters. Its hard substance gives it unusual shipping quality. Foliage is small and is carried right up to the bloom. Stems are rigid and must be disbudded to a single flower. Like the Mandel varieties, it is vigorous and consistently produces a uniform crop. Because of its free breaking habit, it will stand fairly close cropping and still produce uniform stems. This same quality results in well shaped plants when grown in pots. Ivanhoe holds its color well under early shade when good bronze disbuds command a premium market. Its natural season is November 1st. Price: \$100.00 per thousand Rooted Cuttings.

PINOCCHIO (Yoder Bros.)

A glistening white button for early cloth house shading. It responds beautifully to black cloth treatment and for this reason we believe it will fill the insistent demand for a small white pompon that can be easily shaded into late August and early September maturity. The flower is a beautifully formed tightly quilled button of lively and dainty appearance. It is of hard substance and

has good keeping and shipping qualities. The color is a clear sparkling white. The growth is vigorous, taller than Irene and requires less time between pinching and shading to form a fuller spray of flowers. Bunches of Pinocchio appear smarter than Irene because the spray formation is more nearly single planed; and fresher because of the more uniform opening of its flowers. Price: \$100.00 per thousand Rooted Cuttings.

GOLDEN EMBLEM



PINOCCHIO

GOLDEN EMBLEM (De Petris)

Medium sized clear yellow pompon that blooms normally the end of November. The flowers are produced on well spaced sprays and are of close compact form with very good substance. It combines good quality with good production and disease resistance. Good results are obtained either in ground or raised benches. It will not produce blind growth so common in late varieties. Maturing the latter part of November, Golden Emblem will be found to be a welcome addition to yellow pompons in that season where quality and easy growth is combined with good production. Price: \$100.00 per thousand Rooted Cuttings.

DON'T DELAY—ORDER YOUR 1946 NEEDS NOW

FOR YOUR 1946 PLANTING

RUSTICON (Yoder Bros.)

An intense rust red pompon for Thanksgiving. The flower is of a very attractive decorative form having excellent substance and a very full petallage. The growth is vigorous and persistent. It is of extremely easy culture, its dark rigid sprays and high production combine to give it a definite place in the highly competitive Thanksgiving season. It possesses more vigor than Red Rolinda, a quality of flower far superior to Legal Tender and just precedes Bronze Goldsmith in flowering. The very appealing color of Rusticon is a rich blend of crimson and rust bronze which commands immediate attention at Thanksgiving. Price: \$100.00 per thousand Rooted Cuttings.



HARVESTER

PLEASE SEE OUTSIDE BACK COVER
FOR AN OUTSTANDING NOVELTY,
"MATCHLESS" (DePetris)



RUSTICON

HARVESTER (Yoder Bros.)

An intense canary yellow standard that blooms for Thanksgiving. The flower is of medium size, hard and durable, its bright, lustrous color; its wax-like petals and its very attractive semi-incurred form give this variety an appearance of substance and freshness that commands immediate attention. The foliage is attractive and healthy and is carried right up to the base of the flower. The stems are medium in size, strong and rigid. Harvester is a good shipper and is well liked by the retail trade. We recommend this variety to all growers as an easily grown bright yellow standard for the Thanksgiving season. Price: \$100.00 per thousand Rooted Cuttings.

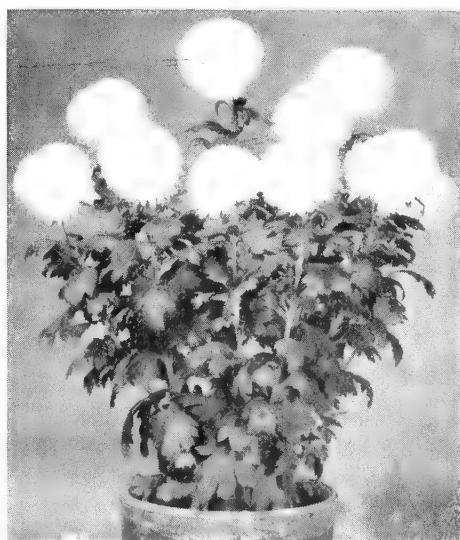
GRANITE STATE

A small, clear white mum ideally suited for pot plant culture. The flower is of good substance, semi-incurred form and matures normally October 25. The growth habit is similar to Richard Mandel, being dwarf and compact. Granite State responds well to early shade, producing a quality flower much superior to Christina. A fine contribution to pot plant culture from the University of New Hampshire. Price: \$100.00 per thousand Rooted Cuttings.

YELLOW CAMEO (Yoder Bros.)

A deep lemon yellow sport from Cameo. The form and growth habit are identical with the parent variety. Because of the increasing popularity of Cameo, this attractive yellow counterpart should be a very valuable variety for early December flowering, when Yellow Cordova is cut out and December Gold and Vibrant not yet ready to cut. The flower opens slowly, increasing in size, attractiveness and substance until at full maturity it is at its best. Even after full development the crop may be held for a considerable time. Because of its strong well branched spray and large sized flowers, it bunches to good advantage. Very acceptable in any market. A good producer that is easy to grow. Price: \$100.00 per thousand Rooted Cuttings.

GRANITE STATE



DON'T DELAY—ORDER YOUR 1946 NEEDS NOW

STRONG ROOTED CUTTINGS

Pompom, Single and Anemone Varieties

Types are abbreviated as follows: Pom.—Pompon; Dec.—Decorative; Sing.—Single; Anem.—Anemone. Size of flower is indicated by S.—Small; Int.—Intermediate; L.—Large.

Varieties preferred for garden culture

YELLOW

Name and Description	Size & Type	Matures	Un-rooted Cuttings Price Per 1000	Rooted Cuttings Price Per 1000
• BARBARA CUMMING. Buff yellow... Int. Dec.		Sept. 15	27.50	37.50
•Early Yellow. Light golden yellow... S. Pom.		Sept. 15	27.50	37.50
•Morning Star. Primrose yellow... Int. Dec.		Sept. 20	90.00	100.00
•Pomponette. Light buff yellow... Int. Pom.		Sept. 20	27.50	37.50
•Wolverine. Light yellow... Int. Dec.		Sept. 25	27.50	37.50
•King Midas. Light lemon yellow... Int. Dec.		Sept. 30	27.50	37.50
Judith Anderson. Golden yellow... S. Pom.		Oct. 15	27.50	37.50
• YELLOW IRENE. Light lemon yellow. Sport from Irene... S. Pom		Oct. 18	27.50	37.50
RODELL IMPROVED. Light lemon yellow... Int. Pom.		Oct. 20	27.50	37.50
Yellow Hammer. Golden yellow... Int. Pom.		Oct. 20	27.50	37.50
Cincinnati. Golden yellow... L. Pom.		Oct. 20	27.50	37.50
GOLDEN SPRAY. Deep lemon yellow... Int. Pom.		Oct. 23	27.50	37.50
GOLDEN HERALD. Deep golden yellow... L. Dec.		Oct. 25	27.50	37.50
YELLOW DOT. Yellow with bronze center. Sport from Pink Dot... Int. Pom.		Oct. 25	27.50	37.50
YELLOW ARCADIA. Pernet yellow... Int. Pom.		Oct. 28	27.50	37.50
YELLOW DAISY. Deep lemon yellow... Int. Sing.		Nov. 1	27.50	37.50
MARY LENNON HALL (Vera Victoria). Deep lemon yellow... Int. Pom.		Nov. 1	27.50	37.50
Yellow Sea Gull. Light lemon yellow. Sport from Sea Gull... Int. Pom.		Nov. 1	27.50	37.50
Yellow Doty. Buff yellow... L. Pom.		Nov. 1	27.50	37.50
BARCAROLE. Golden yellow... Int. Pom.		Nov. 5	90.00	100.00
NUGGETS. Golden yellow... S. Pom.		Nov. 5	27.50	37.50
YELLOW BUSHNELL. Pernet yellow. Sport from Rev. Bushnell... Int. Pom.		Nov. 8	27.50	37.50
PIXIE. Deep golden yellow... S. Pom.		Nov. 10	40.00	50.00
Derigold. Deep golden yellow... Int. Pom.		Nov. 10	27.50	37.50
Yellow Beauty. Golden yellow... L. Pom.		Nov. 10	27.50	37.50
Helios. Deep golden yellow... L. Anem.		Nov. 10	27.50	37.50
Yellow New York. Deep lemon yellow. Sport from New York... S. Pom.		Nov. 13	27.50	37.50
COQUETTE. Clear golden yellow... S. Pom.		Nov. 15	70.00	80.00
PRINCETON. Orange yellow... Int. Dec.		Nov. 15	27.50	37.50
YELLOW FELLOW. Deep lemon yellow... Int. Dec.		Nov. 15	27.50	37.50
Sunray. Light lemon yellow... Int. Anem.		Nov. 15	27.50	37.50
SUSANNE MILLER. Buff yellow. Sport from Norma... L. Anem.		Nov. 18	27.50	37.50
GOLDEN SURPRISE. Sulphur yellow, shading to golden yellow... Int. Pom.		Nov. 18	40.00	50.00
GOLDEN EMBLEM. Golden yellow... Int. Pom.		Nov. 20	90.00	100.00
Hasegawa Gold. Light golden yellow... Int. Pom.		Nov. 23	27.50	37.50
Yellow Rolinda. Light buff yellow. Sport from Relinda... Int. Anem.		Nov. 23	27.50	37.50
SUNNYSIDE. Golden yellow... Int. Pom.		Nov. 25	40.00	50.00
LODESTAR. Golden yellow... Int. Sing.		Nov. 25	70.00	80.00
GOLDSMITH. Golden yellow... Int. Dec.		Nov. 25	27.50	37.50
Citrus Queen. Lemon orange... L. Anem.		Nov. 25	27.50	37.50
Christmas Gold. Deep golden yellow... S. Pom.		Nov. 28	27.50	37.50
GOLDEN JANE. Brilliant golden yellow. Sport from Jane... L. Sing.		Nov. 28	40.00	50.00
YELLOW CORDOVA. Lemon yellow. Sport from Cordova... Int. Dec.		Nov. 30	27.50	37.50
Gold Coin (Unalga). Deep lemon yellow... Int. Pom.		Dec. 1	27.50	37.50
Golden Modena. Deep lemon yellow. Sport from Modena... Int. Pom.		Dec. 5	27.50	37.50
YELLOW CAMEO. Deep lemon yellow... Int. Pom.		Dec. 5	90.00	100.00
Yellow Supreme. Buff yellow suffused with pink. Sport from Pink Supreme... L. Anem.		Dec. 10	27.50	37.50
Spun Gold. Deep lemon yellow... Int. Dec.		Dec. 15	27.50	37.50
DECEMBER GOLD. Deep golden yellow... Int. Dec.		Dec. 15	27.50	37.50
Christmas Cheer. Buff yellow... Int. Pom.		Dec. 15	27.50	37.50
YELLOW GARZA SUPREME. Light lemon yellow... Int. Anem.		Dec. 15	27.50	37.50
VIBRANT. Deep lemon yellow... Int. Dec.		Dec. 20	27.50	37.50
Winterset. Lemon yellow... Int. Pom.		Dec. 25	27.50	37.50
YELLOW SNOW. Deep lemon yellow... Int. Pom.		Dec. 30	27.50	37.50

WHITE

Name and Description	Size & Type	Matures	Un-rooted Cuttings Price Per 1000	Rooted Cuttings Price Per 1000
Silver Moon. Cream white... Int. Sing.		Sept. 15	27.50	37.50
•Normandie. White suffused with pink. Int. Dec.		Sept. 20	27.50	37.50
•Jean Cumming. Ivory white... Int. Dec.		Sept. 20	27.50	37.50
Avalanche... Int. Dec.		Oct. 5	50.00	60.00
Uvadilla. Cream white... Int. Pom.		Oct. 10	27.50	37.50
•WHITE JEWELL. White tinged with light lavender... S. Pom.		Oct. 15	27.50	37.50
Silver Ball... L. Pom.		Oct. 15	27.50	37.50
•IRENE... S. Pom.		Oct. 18	27.50	37.50
MINONG... S. Pom.		Oct. 20	27.50	37.50
GRANITE STATE. White... L. Pom.		Oct. 25	90.00	100.00
PINOCCHIO. White... S. Pom.		Oct. 25	90.00	100.00
ARCADIA... Int. Pom.		Oct. 28	27.50	37.50
Graceland. White with yellow center... Int. Anem.		Oct. 28	27.50	37.50
SEA GULL. Cream white... Int. Pom.		Nov. 1	27.50	37.50

Pompom, Single and Anemone Varieties (Continued)

Types are abbreviated as follows: Pom.—Pompon; Dec.—Decorative; Sing.—Single; Anem.—Anemone. Size of flower is indicated by S.—Small; Int.—Intermediate; L.—Large.

WHITE (Continued)

Name and Description	Size & Type	Matures	Un-rooted Cuttings Price Per 1000	Rooted Cuttings Price Per 1000
WHITE DOTY. Ivory white... L. Pom.		Nov. 1	27.50	37.50
Blanche... Int. Anem.		Nov. 1	27.50	37.50
NANCY CRAIN... S. Pom.		Nov. 5	70.00	80.00
White Anemone... Int. Anem.		Nov. 5	27.50	37.50
REV. HORACE BUSHNELL. Cream white... Int. Pom.		Nov. 8	27.50	37.50
Shasta... Int. Anem.		Nov. 8	27.50	37.50
Crystal Jewell... S. Pom.		Nov. 8	27.50	37.50
VESPER... Int. Pom.		Nov. 10	40.00	50.00
White Mensa. Ivory white... Int. Sing.		Nov. 10	27.50	37.50
LITTLE AMERICA... Int. Anem.		Nov. 10	27.50	37.50
Richard Mandel... L. Pom.		Nov. 10	27.50	37.50
CHICAGO PEARL. Ivory white... Int. Pom.		Nov. 15	27.50	37.50
WHITE FRIEDA. White with yellow cushion... L. Anem.		Nov. 15	27.50	37.50
White Norma. White suffused with pink... L. Anem.		Nov. 18	27.50	37.50
Long Island Beauty. White with yellow cushion... L. Anem.		Nov. 20	27.50	37.50
MATCHLESS. White... Int. Pom.		Nov. 20	90.00	100.00
NEVADA. White with chartreuse green cushion... Int. Anem.		Nov. 20	70.00	80.00
Pearl... Int. Pom.		Nov. 20	27.50	37.50
SEAFOAM... Int. Pom.		Nov. 20	40.00	50.00
Priscilla... Int. Pom.		Nov. 23	70.00	80.00
White Yuletide... Int. Pom.		Nov. 28	27.50	37.50

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Br. Daisy	7	Early Wonder	7	Indiam Summer	7
Br. Freida	7	Early Yellow	6	Irene	6
Br. Frick	8	Ed. Seidewitz	8	Ivanhoe	8
Br. Goldsmith	7	Eliz. Peterson	7	Ivory Snow	7
Br. Masterpiece	7	Enchantress	8	Jane	7
Br. Mistletoe	8	Ethrelda	8	Jean Cumming	6
Br. Orchid Queen	8	Europa	7	Jean Treadway	7
Br. Supreme	7	Fez	7	Jessie	8
Burgundy	7	Fire Bird	7	Jewell	7
Caliph	7	Freida	8	Friendly Rival	8
Cambria	8	Garnet King	8	Judith Anderson	6
Cameo	7	Garza Supreme	7	Justrite	8
Capt. Cook	8	Gardonia	8	J. W. Prince	8
Carillon	8	Gladys Pearson	8	King Midas	6
Carnelia	7	Glitters	8	Mahogany Viking	7
Cassandra	7	Glow	7	Legal Tender	7
Catherine	7	Gold Coin	6	Lillian Doty	8
Cavalcade	7	Gold Imperial	7	Linda Lou	8
Celestra	8	Gold Lode	8	Little America	6
Chattanooga	8	Goldsmith	6	Lodestar	6
Chicago Pearl	6	Golden Emblem	6	L. I. Beauty	6
Christina	8	Golden Glory	8	Mahogany Viking	7
Christmas Cheer	6	Golden Herald	6	Major Bowes	8
Christmas Gold	6	Golden Jane	6	Mandarin	7
Christmas Supreme	7	Golden Mistletoe	8	Margaret Moeller	8
Chrome Emerald	7	Golden Modena	6	Marie Depetris	8

SPECIAL QUANTITY DISCOUNTS

Quantity discounts will be allowed on each order for more than 10,000 cuttings as follows:

10,000 to 24,950... 2½% 25,000 to 49,950... 5% 50,000 to 99,950... 7½%
100,000 to 249,950... 10% 250,000 up... 12½%

DON'T DELAY—ORDER YOUR 1946 NEEDS NOW

FINEST VARIETIES AVAILABLE

Pompom, Single and Anemone Varieties (Continued)

Types are abbreviated as follows: Pom.—Pompon; Dec.—Decorative; Sing.—Single; Anem. Anemone. Size of flower is indicated by S.—Small; Int.—Intermediate; L.—Large.

Name and Description	Size & Type	Maturities	Unrooted Price Per Unit	Rooted Cuttings Price Per Unit
CORDOVA. Cream white.....	Int. Dec.	Nov. 30	27.50	37.50
Royal Queen	Int. Pom.	Dec. 5	27.50	37.50
CAMEO. Ivory white.....	Int. Pom.	Dec. 5	27.50	37.50
Silver Star Ivory white.....	Int. Pom.	Dec. 10	27.50	37.50
YUKON	Int. Sing.	Dec. 10	27.50	37.50
White Supreme. White suffused with pink	L. Anem.	Dec. 10	27.50	37.50
December Glory. Pompon ivory white.....	Int. Dec.	Dec. 15	27.50	37.50
GARZA SUPREME	Int. Anem.	Dec. 15	27.50	37.50
IVORY SNOW. Ivory yellow.....	Int. Pom.	Dec. 30	70.00	80.00
SNOW. Ivory white.....	Int. Pom.	Dec. 30	27.50	37.50
REVELATION	Int. Pom.	Dec. 30	40.00	50.00
BRONZE AND RED				
•Early Bronze. Orange bronze.....	S. Pom.	Sept. 15	27.50	37.50
•Burgundy. Wine red.....	Int. Dec.	Oct. 5	27.50	37.50
•Ruby Pompon. Ruby crimson.....	Int. Pom.	Oct. 5	70.00	80.00
•Caliph. Deep red.....	Int. Dec.	Oct. 8	27.50	37.50
•Red Velvet. Velvety crimson.....	Int. Dec.	Oct. 8	70.00	80.00
•Ruth Cumming. Reddish bronze.....	Int. Dec.	Oct. 8	27.50	37.50
Mandarin. Coral salmon.....	Int. Dec.	Oct. 10	27.50	37.50
•Aviator. Coppery red.....	Int. Dec.	Oct. 10	90.00	100.00
•Indian Summer. Orange bronze.....	Int. Dec.	Oct. 15	27.50	37.50
Clara Jameson. Dark reddish bronze.....	S. Pom.	Oct. 15	27.50	37.50

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Orchid Beauty	8	Silver Ball	6	Yel. Dot	6
Orchid Queen	8	Silver Moon	6	Yel. Doty	6
Pearl	6	Silver Sheen	8	Yel. Fellow	6
Penrod	8	Silver Star	7	Yel. Garza	6
Peter John	8	Sm. Early White	8	Yel. Hammer	6
Pink Chief	8	Sm. Late White	8	Yel. Irene	6
Pink Dot	8	Snow	7	Yel. Mefo	8
Pink Mistletoe	8	Snow White	8	Yel. Monument	8
Pink Pearl	8	Spun Gold	6	Yel. New York	6
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TERMS OF SALE

1. The minimum total order that can be accepted is 250 cuttings.
 2. Fifty of each variety is the minimum that can be supplied.
 3. More than 50 of a variety must be in multiples of 50.

Pompom, Single and Anemone Varieties (Continued)

Types are abbreviated as follows: Pom.—Pompon; Dec.—Decorative; Sing.—Single; Anem.—Anemone. Size of flower is indicated by S.—Small; Int.—Intermediate; L.—Large.

Name and Description	Size & Type	Ma-	Un-	Rooted
		tures	Cut- tings Price Per 1000	Cut- tings Price Per 1000
Roman Bronze. Bronze suffused with pink. Sport from Capt. Cook.....	Int. Pom.	Oct. 20	27.50	37.50
Thorina. Reddish bronze.....	Int. Pom.	Oct. 20	27.50	37.50
Adelaide. Dark reddish bronze.....	S. Pom.	Oct. 23	27.50	37.50
Jemima. Dark reddish bronze.....	Int. Pom.	Oct. 23	27.50	37.50
NATOMA. Flame scarlet.....	Int. Dec.	Oct. 25	27.50	37.50
FIRE BIRD. Dark reddish bronze.....	Int. Dec.	Oct. 25	27.50	37.50
OCTOBER BRONZE. Light bronze.....	Int. Sing.	Oct. 28	27.50	37.50
Bronze Daisy. Light bronze.....	Int. Sing.	Nov. 1	27.50	37.50
Elizabeth Peterson. Light orange bronze. Int. Dec.	Int. Sing.	Nov. 3	27.50	37.50
Bronze Buckingham. Light orange bronze.....	Int. Sing.	Nov. 3	27.50	37.50
ROBIN HOOD. Dark red.....	S. Pom.	Nov. 5	27.50	37.50
NAVAHO. Deep crimson.....	Int. Pom.	Nov. 5	40.00	50.00
RED DAISY. Deep red.....	Int. Sing.	Nov. 5	27.50	37.50
BITTERSWEET. Bittersweet red.....	Int. Sing.	Nov. 8	90.00	100.00
BRONZE BULKELEY. Bronze suffused with pink. Sport from Mrs. Bulkeley.....	Int. Pom.	Nov. 8	27.50	37.50
CASSANDRA. Orange bronze.....	Int. Pom.	Nov. 10	40.00	50.00
Mason's Bronze. Burnt orange.....	L. Sing.	Nov. 10	27.50	37.50
MASON'S RED. Crimson orange.....	L. Sing.	Nov. 10	27.50	37.50
SYLVANNA. Orange bronze.....	Int. Sing.	Nov. 10	70.00	80.00
EUROPA. Cardinal red.....	L. Sing.	Nov. 10	27.50	37.50
Clara Holford. Deep red.....	L. Sing.	Nov. 10	27.50	37.50
The Titan. Scarlet crimson with bronze red cushion.....	L. Anem.	Nov. 10	27.50	37.50
Melba. Light reddish bronze.....	L. Sing.	Nov. 10	27.50	37.50
Red Melba. Light red.....	L. Sing.	Nov. 10	27.50	37.50
TRIANON. Crimson bronze.....	Int. Pom.	Nov. 13	70.00	80.00
New York. Reddish bronze.....	S. Pom.	Nov. 13	27.50	37.50
BRONZE MASTERPIECE. Rosewood bronze. Sport from Masterpiece.....	Int. Pom.	Nov. 15	27.50	37.50
Fez. Deep reddish bronze.....	S. Pom.	Nov. 15	27.50	37.50
RED PRINCETON. Brazil red.....	Int. Dec.	Nov. 15	27.50	37.50
Mrs. Mary Hooker. Deep red.....	L. Dec.	Nov. 15	27.50	37.50
Gold Imperial. Golden yellow with deep yellow orange center.....	Int. Dec.	Nov. 15	40.00	50.00
BRONZE FREIDA. Salmon buff with yellow center. Sport from Freida.....	L. Anem.	Nov. 15	27.50	37.50
GYPSY. Light reddish bronze.....	S. Anem.	Nov. 15	27.50	37.50
Rusticon. Rust red.....	Int. Pom.	Nov. 20	90.00	100.00
Catherine. Light reddish bronze.....	Int. Dec.	Nov. 20	27.50	37.50
LEGAL TENDER. Bronze and gold.....	Int. Dec.	Nov. 20	27.50	37.50
RED ROLINDA. Deep reddish bronze. Sport from Rolinda.....	Int. Anem.	Nov. 23	27.50	37.50
BRONZE GOLDSMITH. Mars orange. Sport from Goldsmith.....	Int. Dec.	Nov. 25	70.00	80.00
Apricot. Apricot yellow.....	Int. Pom.	Nov. 25	27.50	37.50
Dorothy Turner. Deep reddish bronze.....	Int. Pom.	Nov. 25	27.50	37.50
Yolanda. Light orange bronze.....	S. Anem.	Nov. 25	27.50	37.50
Crimson Glow. Crimson maroon.....	Int. Anem.	Nov. 25	27.50	37.50
ARGO. Orange bronze.....	Int. Pom.	Nov. 28	70.00	80.00
Jane. Light buff bronze. Sport from Valencia.....	L. Sing.	Nov. 28	27.50	37.50
Red Valencia. Light Brazil red. Sport from Valencia.....	L. Sing.	Nov. 28	27.50	37.50
APRICOT VALENCIA. Deep apricot buff. Sport from Dark Pink Valencia.....	L. Sing.	Nov. 28	40.00	50.00
Glow. Orange, reddish orange at center. Int. Pom.	Int. Pom.	Nov. 30	27.50	37.50
CARNELIA. Bittersweet red.....	L. Sing.	Nov. 30	27.50	37.50
CRIMSON CARNELIA. Deep crimson.....	L. Sing.	Nov. 30	70.00	80.00
Royal Crimson. Dark crimson.....	L. Dec.	Dec. 1	27.50	37.50
Viking. Deep reddish bronze shading to orange.....	Int. Sing.	Dec. 1	27.50	37.50
Chrome Emerald. Golden orange with gold cushion.....	Int. Anem.	Dec. 1	27.50	37.50
MAHOGANY VIKING. Mahogany bronze.....	Int. Sing.	Dec. 1	70.00	80.00
Wildfire. Orange rust.....	Int. Dec.	Dec. 3	27.50	37.50
CAVALCADE. Mandarin red. Golden bronze reverse.....	Int. Pom.	Dec. 10	27.50	37.50
Bronze Supreme. Light bronze suffused with pink.....	L. Anem.	Dec. 10	27.50	37.50
SARONG. Crimson scarlet.....	Int. Sing.	Dec. 15	27.50	37.50
PINK				
MORNING GLOW. Mauve pink.....	S. Dec.	Sept. 25	90.00	100.00
Early Wonder. Lavender.....	Int. Dec.	Sept. 25	27.50	37.50
Jean Treadway. Light rose pink with dark center.....	Int. Dec.	Oct. 1	27.50	37.50
Mrs. du Pont. Peach pink shading to rosy salmon.....	Int. Dec.	Oct. 5	50.00	60.00
Rose Glow. Raspberry changing to opalescent rose.....	S. Dec.	Oct. 5	27.50	37.50
Lavender Lady. Lavender.....	Int. Dec.	Oct. 8	50.00	60.00
Symphony. Mauve coppery pink and lavender.....	Int. Dec.	Oct. 12	27.50	37.50
JEWELL. Lavender.....	S. Pom.	Oct. 15	27.50	37.50

PINK

		PINK	
•	MORNING GLOW. Mauve pink.....	S. Dec.	Sept. 25 90.00 100.00
•	Early Wonder. Lavender.....	Int. Dec.	Sept. 25 27.50 37.50
•	Jean Treadway. Light rose pink with dark center	Int. Dec.	Oct. 1 27.50 37.50
•	Mrs. du Pont. Peach pink shading to rosy salmon	Int. Dec.	Oct. 5 50.00 60.00
•	Rose Glow. Raspberry changing to opalescent rose	S. Dec.	Oct. 5 27.50 37.50
•	Lavender Lady. Lavender.....	Int. Dec.	Oct. 8 50.00 60.00
•	Symphony. Mauve coppery pink and lavender	Int. Dec.	Oct. 12 27.50 37.50
•	JEWELL. Lavender	S. Pom.	Oct. 15 27.50 37.50

DON'T DELAY—ORDER YOUR 1946 NEEDS NOW

STRONG ROOTED CUTTINGS

Pompom, Single and Anemone Varieties (Continued)

Types are abbreviated as follows: Pom.—Pompon; Dec.—Decorative; Sing.—Single; Anem.—Anemone. Size of flower is indicated by S.—Small; Int.—Intermediate; L.—Large.

PINK (Continued)

Name and Description	Size & Type	Ma-	Un-	rooted	Rooted
		Tures	Cut-	Cut-	tings
			tings	Price	Price
			Per	Per	1000
•Allegro. Shrimp pink.....	Int. Dec.	Oct. 15	90.00	100.00	
•DARK PINK JEWELL. Deep lavender. Sport from Jewell	S. Pom.	Oct. 15	27.50	37.50	
PINK PEARL. Rose pink.....	S. Pom.	Oct. 20	27.50	37.50	
CAPT. COOK. Deep rose pink.....	Int. Pom.	Oct. 23	27.50	37.50	
JESSIE (Madeline). Light lavender.....	Int. Pom.	Oct. 25	27.50	37.50	
PINK DOT. Light pink with deep pink center	Int. Pom.	Oct. 25	27.50	37.50	
OCTOBER PINK. Light lavender.....	Int. Sing.	Oct. 28	27.50	37.50	
Lillian Doty. Light rose pink.....	L. Pom.	Nov. 1	27.50	37.50	
Rose Charm. Lavender.....	L. Pom.	Nov. 1	27.50	37.50	
W. H. Buckingham. Rose pink.....	Int. Sing.	Nov. 3	27.50	37.50	
MRS. MORGAN G. BULKELEY. Light rose pink suffused with orchid lavender.....	Int. Anem.	Nov. 8	27.50	37.50	
DARK PINK BULKELEY. Dark rose pink. Sport from Mrs. Bulkeley.....	Int. Pom.	Nov. 8	27.50	37.50	
Linda Lou. Lavender with yellow cushion	Int. Anem.	Nov. 8	27.50	37.50	
THYRA. Lavender.....	L. Pom.	Nov. 10	27.50	37.50	
QUEEN OF PINKS. Lavender.....	L. Pom.	Nov. 10	27.50	37.50	
Ethrelda. Light lavender.....	Int. Anem.	Nov. 15	27.50	37.50	
MASTERPIECE. Tourmaline pink.....	Int. Pom.	Nov. 15	27.50	37.50	
Orchid Beauty. Orchid with golden cushion	Int. Anem.	Nov. 15	27.50	37.50	
FREIDA. Light lavender with yellow cushion	L. Anem.	Nov. 15	27.50	37.50	
Dark Pink Freida. Deep lavender. Sport from Freida	L. Anem.	Nov. 15	27.50	37.50	
Norma. Orchid pink petals with salmon cushion	L. Anem.	Nov. 15	27.50	37.50	
Dark Pink Norma. Deep lavender. Sport from Norma	L. Anem.	Nov. 18	27.50	37.50	
MINUET. Mauve to rose pink.....	Int. Pom.	Nov. 25	70.00	80.00	
Usona. Lavender.....	Int. Pom.	Nov. 25	27.50	37.50	
Hasegawa. Pink. Lavender.....	Int. Sing.	Nov. 25	27.50	37.50	
BEAUTIFUL LADY. Deep lavender rays with cream white cushion.....	L. Anem.	Nov. 25	27.50	37.50	
VALENCIA. Orchid pink.....	L. Sing.	Nov. 28	27.50	37.50	
DARK PINK VALENCIA. Deep orchid pink	Int. Sing.	Nov. 28	27.50	37.50	
Enchantress. Deep pink with light pink cushion	L. Anem.	Dec. 5	27.50	37.50	
RIVIERIA. Luminous pink.....	Int. Dec.	Dec. 10	40.00	50.00	
Prosperity. Deep lavender.....	Int. Dec.	Dec. 10	27.50	37.50	
Dark Pink Supreme. Lavender. Sport from Pink Supreme.....	L. Anem.	Dec. 10	27.50	37.50	
CARILLON. Deep orchid pink.....	Int. Sing.	Dec. 15	27.50	37.50	
Pink Treasure Island. Light lavender.....	Int. Dec.	Dec. 20	27.50	37.50	
ROSALAND. Rose pink.....	Int. Sing.	Dec. 20	27.50	37.50	

Large Flowering Commercial Varieties

YELLOW

GOLD LODE. Light golden yellow.....	Int. Reflexed	Oct. 10	27.50	37.50	
Golden October. Deep lemon yellow.....	Int. Semi-Inc.	Oct. 15	27.50	37.50	
CELESTRA. Lemon yellow.....	S. Incurred	Oct. 15	27.50	37.50	
MRS. H. E. KIDDER. Deep lemon yellow.	L. Incurred	Oct. 20	27.50	37.50	
Yellow Ambassador. Light lemon yellow. Sport from Ambassador.....	L. Incurred	Oct. 23	27.50	37.50	
BLAZING GOLD. Deep golden yellow.	Int. Incurred	Oct. 25	27.50	37.50	
SUNGLOW. Golden yellow.....	L. Incurred	Oct. 25	27.50	37.50	
Citronella. Light buff yellow.....	Int. Incurred	Oct. 28	27.50	37.50	
Saratoga. Bright golden yellow.....	L. Semi-Inc.	Nov. 1	27.50	37.50	
Golden Glory. Golden yellow.....	Int. Semi-Inc.	Nov. 1	27.50	37.50	
GOOD NEWS. Deep lemon yellow. Sport from Detroit News.....	Int. Incurred	Nov. 1	27.50	37.50	
Yellow Turner. Light yellow.....	L. Incurred	Nov. 5	27.50	37.50	
Cardonia. Deep golden yellow.....	Int. Incurred	Nov. 10	27.50	37.50	
PENROD. Golden yellow.....	Int. Incurred	Nov. 10	27.50	37.50	
Whittier. Lemon yellow.....	L. Incurred	Nov. 13	27.50	37.50	
YELLOW MONUMENT. Light lemon yellow. Sport from Monument.....	L. Incurred	Nov. 15	27.50	37.50	
Honey Dew. Lemon yellow.....	Int. Incurred	Nov. 15	27.50	37.50	
HARVESTER. Deep canary yellow.....	S. Incurred	Nov. 20	90.00	100.00	
YELLOW MEFO. Lemon yellow.....	L. Incurred	Nov. 20	27.50	37.50	
RELIANCE. Light lemon yellow.....	L. Incurred	Nov. 20	70.00	80.00	
BONNAFFON DELUXE. Golden yellow.	S. Incurred	Nov. 20	27.50	37.50	
FRIENDLY RIVAL. Deep chrome yellow.	L. Incurred	Nov. 20	27.50	37.50	
MARIE DEPETRIS. Deep golden yellow.	L. Incurred	Nov. 23	27.50	37.50	
SUN GOLD. Lemon yellow.....	Int. Semi-Inc.	Nov. 25	27.50	37.50	
GOLDEN PEARSON (Leroy Zang). Light golden yellow. Sport from Gladys Pearson	Int. Incurred	Nov. 25	27.50	37.50	
IMPROVED YELLOW CHATTANOOGA. Light lemon yellow	L. Incurred	Nov. 25	27.50	37.50	

Large Flowering Commercial Varieties (Continued)

Types are abbreviated as follows: Pom.—Pompon; Dec.—Decorative; Sing.—Single; Anem.—Anemone. Size of flower is indicated by S.—Small; Int.—Intermediate; L.—Large.

YELLOW (Continued)

Name and Description	Size & Type	Ma-	Un-	rooted	Rooted
GOLDEN MRS. ROSS. Golden yellow.	L. Incurred	Dec. 3	27.50	37.50	
Golden Mistletoe. Light golden yellow.	L. Incurred	Dec. 10	27.50	37.50	
Meteore. Lemon yellow.....	Int. Semi-Inc.	Dec. 10	70.00	80.00	
IMPROVED TOBIN'S LATE YELLOW. Deep lemon yellow. Sport from Tobin's Late Yellow.....	Int. Semi-Inc.	Dec. 15	27.50	37.50	

WHITE

Smith's Early White.....	Int. Semi-Inc.	Oct. 5	27.50	37.50	
Quaker Maid. White, tinged with pink.	Int. Reflexed	Oct. 15	27.50	37.50	
SILVER SHEEN	Int. Incurred	Oct. 18	27.50	37.50	
Christina.....	S. Incurred	Oct. 20	27.50	37.50	
Ambassador. Cream white.....	L. Incurred	Oct. 23	27.50	37.50	
ALBATROSS	L. Incurred	Nov. 1	27.50	37.50	
SNOW WHITE	Int. Incurred	Nov. 1	27.50	37.50	
BETSY ROSS. Ivory white.....	L. Incurred	Nov. 1	27.50	37.50	
William Turner. White.....	L. Incurred	Nov. 5	27.50	37.50	
INDIANAPOLIS WHITE	Int. Incurred	Nov. 8	27.50	37.50	
MONUMENT. Ivory white.....	L. Incurred	Nov. 15	27.50	37.50	
MARKETEER	Int. Semi-Inc.	Nov. 18	27.50	37.50	
MEFO. Ivory white.....	L. Incurred	Nov. 20	27.50	37.50	
White Frick. White suffused with pink. Sport from Helen Frick.....	Int. Incurred	Nov. 25	27.50	37.50	
CHATTANOOGA	L. Incurred	Nov. 25	27.50	37.50	
DECEMBER GLORY. Large ivory white.	Int. Incurred	Dec. 1	27.50	37.50	
December White	Int. Incurred	Dec. 5	70.00	80.00	
Improved December Beauty. Sport from December Beauty.....	L. Incurred	Dec. 8	27.50	37.50	
MARGARET MOELLER. White.....	Incurred	Dec. 10	90.00	100.00	
WHITE MISTLETOE	Int. Incurred	Dec. 10	27.50	37.50	
SMITH'S LATE WHITE. Ivory white.....	Int. Semi-Inc.	Dec. 15	27.50	37.50	

BRONZE AND RED

Indianola. Light reddish bronze.....	Int. Semi-Inc.	Oct. 10	27.50	37.50	
Hilda Bergen. Dark reddish bronze.....	S. Incurred	Oct. 25	27.50	37.50	
Cambrica. Golden bronze.....	Int. Incurred	Oct. 25	27.50	37.50	
Alemeda. Reddish bronze with buff reverse	Int. Incurred	Oct. 25	27.50	37.50	
Glitters. Deep reddish orange.....	Int. Reflexed	Oct. 28	27.50	37.50	
IVANHOE. Reddish bronze.....	S. Reflexed	Nov. 1	90.00	100.00	
Apricot Queen. Orange bronze.....	Int. Incurred	Nov. 1	27.50	37.50	
DETROIT NEWS. Reddish bronze with buff reverse	Int. Incurred	Nov. 1	27.50	37.50	
INDIANAPOLIS BRONZE. Buff bronze suffused with pink	Int. Incurred	Nov. 1	27.50	37.50	
BRONZE ORCHID QUEEN. Apricot buff.	L. Incurred	Nov. 10	27.50	37.50	
ANACONDA. Deep coppery red with golden bronze reverse	Int. Incurred	Nov. 15	40.00	50.00	
MRS. DAVID F. ROY. Crimson with deep buff reverse	Int. Incurred	Nov. 15	27.50	37.50	
Mrs. A. J. Stachelin. Reddish bronze.....	Int. Incurred	Nov. 15	27.50	37.50	
Garnet King. Dark red.....	Int. Reflexed	Nov. 18	27.50	37.50	
GLADYS PEARSON. Light buff bronze.	Int. Incurred	Nov. 25	27.50	37.50	
OAK LEAF. Reddish bronze.....	Int. Incurred	Nov. 25	27.50	37.50	
Bronze Frick. Light bronze, suffused with pink. Sport from Helen Frick.....	Int. Incurred	Dec. 10	27.50	37.50	
Harvard. Deep red.....	Int. Reflexed	Nov. 30	27.50	37.50	
Mohawk Chief. Deep red.....	Int. Reflexed	Nov. 30	27.50	37.50	
Bronze Mistletoe. Buff bronze suffused with pink	Int. Incurred	Dec. 10	27.50	37.50	

PINK

Early October. Light lavender.....	S. Semi-Inc.	Oct. 10	70.00	80.00	
PINK CHIEF. Lavender.....	Int. Incurred	Oct. 15	27.50	37.50	
Justrite. Light rose pink.....	S. Incurred	Oct. 15	27.50	37.50	
Major Ed. Bowes. Deep lavender.....	Int. Incurred	Oct. 20	27.50	37.50	
October Rose. Light lavender.....	Int. Incurred	Oct. 20	27.50	37.50	
Rose Chochard. Light lavender.....	S. Incurred	Oct. 20	27.50	37.50	
Rosabella. Rose pink	S. Incurred	Oct. 25	27.50	37.50	
Rosy Morn. Deep rich pink with light lavender reverse	Int. Incurred	Oct. 25	70.00	80.00	
Pink Turner (Mrs. Leslie Davis). Lavender	L. Incurred	Nov. 5	27.50	37.50	
J. W. PRINCE (Improved Chieftain). Rose pink	Int. Incurred	Nov. 5	27.50	37.50	
INDIANAPOLIS PINK. Deep lavender with pale reverse	Int. Incurred	Nov. 8	27.50	37.50	
ORCHID QUEEN. Orchid pink.....	L. Incurred	Nov. 10	27.50	37.50	
Aristocrat. Deep orchid pink.....	L. Incurred	Nov. 20	70.00	80.00	
Thanksgiving Pink. Amaranth.....	Int. Reflexed	Nov. 23	27.50	37.50	
Peter John. Deep rose pink. Sport from Thanksgiving Pink	Int. Reflexed	Nov. 23	27.50	37.50	
HELEN FRICK. Rose pink	Int. Incurred	Nov. 25	27.50	37.50	
EDWIN SEIDEWITZ. Lavender	Int. Incurred	Nov. 30	27.50	37.50	
Pink Mistletoe. Lavender	Int. Incurred	Dec. 10	27.50	37.50	

DON'T DELAY—ORDER YOUR 1946 NEEDS NOW

RECENT INTRODUCTIONS

RIVIERA

(Yoder Bros.)

A luminous pink decorative pompon blooming normally about December 10, just nicely following Minuet. This variety finishes beautifully, maintaining its color and form much better than existing varieties that bloom at the same season. The flower is showy and of good substance. Its heavy petallage permits an extended season of cutting. The growth is vigorous, of medium height and high production. The spray resembles that of Snow, being extremely rigid and well branched. With the application of electric lights Riviera is easily delayed to the important Christmas season. Price: \$50.00 per 1000.

VESPER

(Yoder Bros.)

This variety combines the flower quality of Rev. Bushnell with the free growth and high production of Sea Gull. It is a pure white pompon of unusually good substance, blooming normally November 10. Its heavy petallage permits a long period of cutting. Under black cloth shade, it just follows Sea Gull. Of free growth and easy culture, Vesper raises the existing standard of dependable and profitable early white pompons. Price: \$50.00 per 1000.

REVELATION

(Yoder Bros.)

Revelation fills the need for quality white pompons for the January market. It will thrive and produce abundantly under any condition or method of growing that will produce a satisfactory crop of Garza. It has never been known to go blind. Revelation makes possible the easy production of high quality white pompons for Christmas and early January, without loss of production or risk to the grower. With the careful application of a small amount of electric light, its flowering can be extended into early February. Price: \$50.00 per 1000.

SUNNYSIDE

(Yoder Bros.)

This variety fills the persistent demand from all wholesale growers for a round, hard flower which will ship and handle without bruising or other damages. It is a strong grower and will consistently produce a heavy crop of well-branched sprays that are easy to bunch. The quality

of flower is equal to or better than any existing yellow pompon regardless of season. The color is a clear, brilliant yellow. Its season is Thanksgiving and later. It will hold well on the bench. Price: \$50.00 per 1000.

BARCAROLE

(Yoder Bros.)

An intense golden yellow pompon that blooms normally November 5. The habit of growth is outstandingly vigorous. It is of extremely easy culture and its smart, dark, glossy foliage, its rigid sprays and high production mark it as a real bread and butter variety. It responds rapidly to shade, flowering with Nuggets when shaded with that variety. We suggest that those who now grow Mary Lennon Hall under black cloth will find Barcarole a more satisfactory variety. Price: \$100.00 per 1000.

BITTERSWEET

(Yoder Bros.)

A beautiful medium-sized bittersweet red daisy that blooms normally November 8. The flower possesses good substance and keeping qualities. It retains its brilliance with full maturity. The flower has from 3 to 4 rows of stiff, broad petals that lay perfectly flat, giving a fresh, lively and attractive appearance. Bittersweet has a stiff wiry stem and produces well-branched sprays. The foliage is small, dark-green and glossy. It bunches well and because of its striking color and attractive foliage, it commands attention when displayed with other varieties. Bittersweet creates its own market demand. Price: \$100.00 per 1000.

BRONZE GOLDSMITH

(Yoder Bros.)

A sport from the original variety Goldsmith, similar to and richer in color than well-grown Natoma or Red Princeton. Its color is always in keen demand. In growth and season, it is identical to the parent variety. Carefully grown, Bronze Goldsmith on disbudded sprays is, for bronze pompons, unsurpassed in quality and value for late September and October flowering in the cloth house. Price: \$80.00 per 1000.

MINUET

(Yoder Bros.)

A soft pink pompon similar in color to Mrs. Morgan Bulkeley and equal or better than that variety in flower

quality and growth habit. Minuet provides a pink pompon for Thanksgiving that is so superior to existing late November pink pompons that it should become the leading variety for that season. Price: \$80.00 per 1000.

SYLVANNA

(Yoder Bros.)

One of the few cloth house daisies that combine a high quality flower and a growth habit that can be depended upon to produce a heavy crop under a wide diversity of soils and cultural conditions. The color, a brilliant orange bronze, holds well with full maturity, allowing an extended period for marketing. When successively shaded, Sylvanna makes a fine cut flower from the middle of September until November 10, its natural maturing date. Price: \$80.00 per 1000.

ARGO

(De Petris)

A medium-sized pompon with good decorative form and excellent substance for Thanksgiving and early December. The color is a beautiful bronzy orange, shading to a rust. In color and in growth habit, which is somewhat dwarf and rigid, it resembles the later variety Cavalcade. It makes its growth late in the season and therefore should not be planted late. Argo is a quality pompon with a very appealing color which sells on sight. Price: \$80.00 per 1000.

NEVADA

(De Petris)

A desirable and useful anemone producing flowers of high quality for Thanksgiving. The color is pure white with a chartreuse green center. This variety responds well to generous spacing and disbudded spray technique. For the grower who appreciates Europa, Valencia and its sports, Nevada provides a white of equal quality. Price: \$80.00 per 1000.

GOLDEN SURPRISE

(De Petris)

A medium sized yellow pompon of value because of its season just prior to and including Thanksgiving. The growth habit is free and productive. A valuable color in a season when yellow pompons are in great demand. Its increasing popularity is due in part to its rapid response to black cloth shade. Price: \$50.00 per 1000.

RECENT INTRODUCTIONS

TRIANON

(De Petris)

The outstanding merits of Trianon are its appealing crimson bronze color, the perfect form of its small round flowers, its hard substance and its attractive bunches and fine shipping qualities. Its season is that of the well-known variety New York. It is better than that variety in flower color and form. It is in a class with the variety Fez in respect to the quality of flower and superior to that variety in type of growth and the resistance of its foliage to the ravages of insects and disease. It responds normally to shade and holds its color well. Price: \$80.00 per 1000.

MAHOGANY VIKING

(Delworth & Son)

This novel and beautifully colored sport from Viking has a more vigorous growth habit than its parent. The color is intensified to a rich mahogany bronze. The flower is larger and bunches to greater advantage than the parent variety. Growers should find this variety more profitable than the original Viking. Price: \$80.00 per 1000.

CRIMSON CARNELIA

(Delworth & Son)

A distinct color variation from the original variety, Carnelia. The color of this sport is an intense crimson which holds well. It possesses all the good qualities and characteristics of the parent variety. Price: \$80.00 per 1000.

APRICOT VALENCIA

(Yoder Bros.)

A beautiful apricot or rosewood buff sport from Dark Pink Valencia. In growth and form it is identical with this variety, being less vegetative than the original Valencia. The color is distinctly new in this group. It is a favorite with retailers. To the grower of Valencia, we say without hesitation that Apricot Valencia is a valuable addition to this group. Price \$50.00 per 1000.

GOLDEN JANE

(Yoder Bros.)

A beautiful golden intensification of the original buff-bronze Jane. Much brighter and more vivid in color and for this reason a more desirable variety. We predict this variety will replace Jane. Price: \$50.00 per 1000.

IVORY SNOW

(Delworth & Son)

A very soft ivory yellow sport of Snow that provides a color that is extremely useful to the floral designer. The very favorable market response to Ivory Snow, together with the increasing popularity of the pale pastel shades of color, indicate clearly that growers of the variety Snow will find this new sport a valuable and profitable supplement. Price: \$80.00 per 1000.

NAVAHO

(Yoder Bros.)

A medium-sized deep crimson, decorative pompon which changes to a reddish bronze under early shading. It responds well to black cloth and fills a great need for a cloth house variety in its color range. It is at its best when growth is kept soft, plants are generously spaced, and its crop limited to 3 or 4 stems per plant. When so grown, it is undoubtedly the best red pompon for cloth house culture. Price: \$50.00 per 1000.

PIXIE

(Yoder Bros.)

A small, well-rounded pompon somewhat larger than Nuggets, with a color that is much brighter and more attractive. It is a remarkably good shipper. It responds beautifully to shading and is therefore an important yellow pompon for the cloth house during September and October. It blooms normally November 10. For the grower who wants small hard pompons of simple, easy culture, we recommend Pixie. Price: \$50.00 per 1000.

ANACONDA

(De Petris)

A large-flowered incurved commercial possessing excellent substance. It matures November 10, just following Detroit News and preceding Mrs. D. F. Roy. The color is a deep coppery red with golden bronze reverse. A combination very similar to the variety Mrs. D. F. Roy. When shaded for early October, the color is a rich golden copper. Price: \$50.00 per 1000.

SEAFOAM

(De Petris)

A pure white, medium size pompon that blooms November 20-25. The flower resembles that of Rev. Bush-

nell. It has proven to be an important variety for late September and early October flowering in the cloth house. For later flowering it produces a quality product when carefully grown on raised benches. Price: \$50.00 per 1000.

CASSANDRA

(De Petris)

A bright orange bronze pompon that is a distinct advance in color for its season of November 10. It has fully rounded form and good substance. Cassandra has proven an excellent variety for cloth house shade, producing an early crop with little fading. Its cultural requirements are identical with Mrs. Bulkeley and Rev. Bushnell. Price: \$50.00 per 1000.

NEW GARDEN VARIETIES

AVIATOR

(De Petris)

We predict that this new rich coppery red will be the most popular garden Chrysanthemum of its color. The quality of the blooms compares favorably with the finest greenhouse pompons. A vigorous and easy grower, coming into full bloom October 10. Price: \$100.00 per 1000.

MORNING STAR

(De Petris)

A large fully double soft primrose-yellow shading to cream-yellow. Extremely early flowering, blooming from late August until killing frost. The dwarf, vigorous and spreading plants are literally covered with myriads of bloom. It is extremely hardy and the foliage is disease resistant. Price: \$100.00 per 1000.

ALLEGRO

(De Petris)

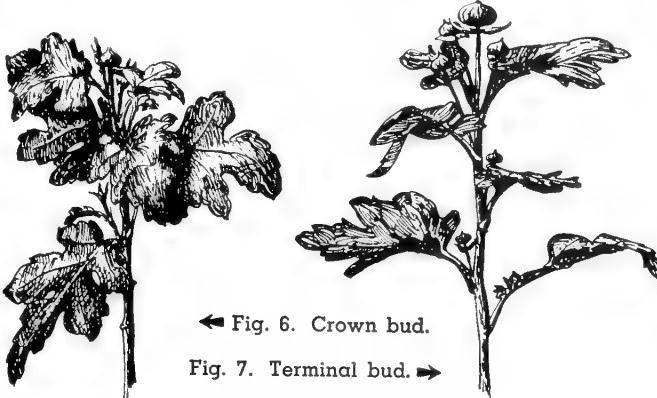
A charming and beautiful variety that will be welcomed by all connoisseurs. It is difficult to describe the unusual blend of glowing shrimp-pink suffused with coppery salmon. One of the finest varieties for cutting, coming into full bloom October 15th. This variety may be disbudded to produce single blossoms. Price: \$100.00 per 1000.

MORNING GLOW

(De Petris)

A lovely early flowering lavender to mauve-pink without a trace of magenta. A most desirable color. Price: \$100.00 per 1000.

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← Fig. 6. Crown bud.

Fig. 7. Terminal bud. ➡

CHRYSANTHEMUMS by ALEX LAURIE

Continued

the bench is wet where the water travelled downward through the cracks and pore spaces, but the main body of the soil is not wet. Failure of plants to grow in sterilized soil is due to insufficient watering to wet the soil and to wash through and leach out the nitrogen which often accumulates to toxic levels.

TEMPERATURE

The chrysanthemum is a cool season crop. During summer maintaining a cool house is impossible, but overhead syringing helps to cool the plants. When the weather becomes cooler in the fall a night temperature of 50° F. is satisfactory. With late planting of late varieties such as Snow, which have not made sufficient growth to give the last pinch by August 1, the night temperature must be carried at 60° F. until buds are visible to prevent blindness. (Fig. 4.)

PINCHING

For many years the main object of pinching was to produce bushy plants with numerous stems. In some varieties such a procedure produced short stems and poor flower sprays; in others it was fairly satisfactory. In recent years the better growers, stimulated by suggestions by Cecil Delworth of Ontario, Canada, have begun to pay more attention to the time of pinching to secure quality. (Fig. 5.)

The suggestions are as follows:

Shaded Chrysanthemums

For early varieties pinch 30 days prior to shading (standards) and 35 days (pompons). Mid-season varieties should be pinched 35 days prior to shading (standards) and 40 days (pompons). If in the case of standards certain varieties show a long neck, pinch seven days later; or if the variety shows center, pinch seven days earlier than the above recommendations. Two to four stems are allowed to develop on the pompons, the spacing varying with the number of stems. Thus, if grown to two stems, plant 6 x 8 inches, three stems 7 x 8, and four stems 8 x 8 inches. Standards, if grown to a single stem, may be planted 6 x 8, if two stems 8 x 8.

Normal Flowering

The following is the suggested schedule for pompons:

Late October varieties, pinch July 1-5.

Early November varieties, pinch July 5-15.

Late November varieties, pinch July 20-25.

December varieties, pinch August 1.

Standards:

October varieties, pinch July 10.

Early November varieties, pinch July 10-25.

Late November varieties, pinch July 20-30.

December varieties, pinch August 1-10.

DISBUDDING

When standards are grown, either one, two, or three stems per plant, each stem must be disbudded to prevent development of side shoots. This should be done regularly when the shoots are long enough to be handled easily. Neglect will cause undue loss of time when operation is performed. Disbuds are handled the same as standards. Pompons are not disbudded.

TAKING BUDS

Taking buds on chrysanthemums is a process peculiar only to this plant. Taking the bud means allowing it to remain and removing all others. Two types of flower buds are produced on the mum. The crown type appears first and is distinguished by being surrounded by shoot buds which grow around it. Sometimes a second crown bud is produced. The terminal type of flower bud is always surrounded by flower buds. A safe rule to remember is never to "take" crown buds on early and midseason varieties that appear before August 15. If no crown buds appear on early or midseason varieties, the terminal bud is selected or "taken." With late varieties the terminal type of bud is always "taken."

If a crown type of bud (Fig. 7) is "taken" all vegetative or shoot buds should be removed. If it is too early to "take" the crown bud all vegetative shoots except the strongest one should be removed along with the crown bud itself. This process should not be delayed too long or crooked stems will result from the failure of the strongest shoot to grow straight. On terminal buds, all the side flower buds are removed when large enough to rub out. (Fig. 7.)

Fig. 3. Wet feet.



CHRYSANTHEMUMS by ALEX LAURIE

Continued

SHADING

Since the chrysanthemum is a short-day plant, the use of black cloth artificially shortens the day and induces earliness of flowering. Standards should be pinched 30-35 days before shading and they should be at least 15-18 inches high before shading. Pompons may be pinched just before shading. The black cloth should completely enclose the plants and is applied at 5 p. m. and removed at 7 to 7:30 a. m. Nothing is to be gained by allowing the cloth to remain over the plants for a longer period of time. Double duty may be secured by shading one bed beginning at 3 p. m. and leaving it on until sun-down and then moving the cloth to another bed and removing it at 9 a. m. The cloth may be applied every night except one for each week, but continuous shading is preferred. When the buds of standards are the size of a nickel or when pompons show color, the use of black cloth may be discontinued. On the early varieties, flowers may be expected approximately 8 weeks after shading. Since chrysanthemums set their buds normally around September 1 there is no point in beginning to apply black cloth after this date. The black cloth is supported by wires over the plants.

LIGHTING

To delay flowering, chrysanthemums may be lighted. Reducing the house temperature to delay flowering impairs quality. Not all varieties respond favorably to light, and if carelessly and improperly used it may injure the crop. The last pinch should be made 10 days later than normal to prevent long necks and imperfect flowers. There are several methods of applying light. One is to begin applying light August 10-15 and run for 2½ hours each night beginning after dark. Use 40-watt bulbs, 3 feet above the tops of the plants, spaced 4 feet apart. Continue lighting for approximately the same number of days as is wished to delay flowering. To prevent heavy, clubby growth, keep the nitrogen level low and raise the temperature to 55° F.

To spread the crop over a longer period, but not actually delay flowering, lights are applied after the buds are the size of a nickel. Use the same spacing and duration of light as previously described.

PEST CONTROL

Chrysanthemums are attacked by many insects and allied pests and these must be kept in check if high quality is expected. (Fig. 8.)

Red spider attacks both leaves and flowers. When on the flowers very little can be done to control them without damaging the flowers. No-Py-Ro at 1-400, Loro at 1-600, or 1-800, with Grasselli Spreader-Sticker at 1-1200, or Dowspray 17 at ¾ lb. per 100 gallons



Grow your outdoor mums under cloth for best results.

may be used. The first two are oil sprays and the latter is a sulphur type—mixtures of oil and sulphur, in the spray tank or alternation on the plant cause severe injury. Loro may stunt pink and white varieties. Azobenzine fumigation is very effective.

Aphids are controlled by cyanide or nicotine fumigations. Nicofume at 1-400 is also effective with soap at 1 cubic inch per gallon or Grasselli Spreader-Sticker at 1-1200 are used.

Thrips are troublesome, as they come in from weeds outside the greenhouse or under the bench. Use 2 lbs. of tartar emetic or 2 quarts of SALP with 4 lbs. of brown or white sugar to 100 gallons of water. Since tartar emetic is slowly soluble, the solution should stand for at least 12 hours before using or very hot water must be used to quickly dissolve it. Greater concentrations of sugar may burn the foliage. Nothing is to be gained by using a low pressure with a coarse nozzle, as thrips rasp the foliage and large drops of the material do not cover the foliage effectively. A fine mist produced by high pressure should be applied to the upper surface of the foliage to thoroughly cover it. D. D. T. is very effective.

Leaf roller must be controlled early before the foliage becomes too thick to cover it easily with insecticide. A dust of 15 parts lead arsenate and 85 parts sulphur is very good. Lead arsenate 2 lbs., and lime 2 lbs., in 50 gallons of water is useful before the foliage staining is objectionable. SALP or tartar emetic sprays are very effective. No-Py-Ro at 1-400 is



Fig. 4. Too cold.

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CHRYSANTHEMUMS by ALEX LAURIE

Continued

also effective. No matter which material is used, start early and cover both upper and lower surfaces of the leaf.

Midge can be controlled by Loro at 1-800 with Grasselli Spreader-Sticker at 1-1200 sprayed every third night for seven or eight applications. Nicofume liquid at 1-400 with Grasselli is effective and is applied the same as Loro. In either case do not apply the spray before 10 p. m. as the midge do not appear until night.

Foliar nematode is controlled by Nicofume liquid at 1-200 with Grasselli. The material must penetrate the leaf to kill the eelworm. Avoid water on the foliage as they spread through it.

Mealy bugs should be sprayed with Loro as recommended for red spider. They are difficult to control. Azobenzine fumigation is very effective.

Soil pests including nematodes, symphylids, and grubs, are controlled by steam sterilization before planting. Once in the bench after planting, there is no known control for the first two pests. For grubs, lead or calcium arsenate broadcast at 5 lbs. per 1,000 sq. ft. is satisfactory.

Sodium selenate or P-40 are being recommended for the control of red spider, thrips, aphids and foliar nematodes. It is very worthy of trial and if used according to directions should eliminate all spraying and fumigation for the pests named above.

DISEASES

The most serious of these is *verticillium wilt*. This disease organism lives within the plant and no spray applied to the outside or any material placed on the soil will do any good. Short tip cuttings should be taken when the plants are growing rapidly or the cuttings purchased from reliable sources. All soil, pots and tools should be steam sterilized.

Stem rot is caused by infection in the propagation bench, too deep planting, or poor drainage.

Septoria spot can be controlled by spraying with 1 lb. of Fermate and Grasselli at 1-1200. Bordeaux mixture is satisfactory but stains the foliage.



FLOWERS

Cutting of flowers before they are fully developed impairs the keeping quality. When standards have expanded and the center is no longer green, they are ready. Pompons are ready when a majority of flowers are open. Pompons are usually sold in 9-oz. bunches.

STOCK PLANTS

After flowering, the plants may be lifted and placed close together in a bench in a cool (45° F.) house. Benches in shady locations, under dripping gutters, etc., are not suitable. The temperature may be raised when the plants show signs of growth in late winter. Control of pests, especially midge, in the stock plants is important.

CLOTH HOUSE

Growing of mums under cloth is similar to greenhouse culture. Pompons are generally grown but standards may be produced providing they are protected from rain when the flowers are expanding.

OUTSIDE

Growing of mums without benefit of cloth usually gives woodier and shorter stems. The quality is not quite as good as cloth house mums. The tarnished plant bug stings the terminal growth and the flowers are blasted or otherwise imperfect, and no effective control is known, except covering with aster cloth. Growing of pompons in the field to be later lifted and moved into the greenhouse about July 15 is an old practice which no longer is used by progressive and good mum growers. Time and labor is wasted and although the plants are heavy, better quality plants can be produced under glass.

POTTED PLANTS

The growing of potted chrysanthemums has fallen gradually in disfavor because of the leggy, unsightly specimens which masquerade under the title of salable plants! The production of stocky growth, with the foliage in perfect development down to the rim of the pot and many flowers uniformly covering the top, requires considerable skill. That in itself should be an inducement to try the growing of these brilliantly colored gifts. There is a scarcity of pot plants in the fall, and the demand remains constant, so that chrysanthemums may well be utilized for this purpose.

Dwarfness of habit and comparatively small size of the flowers are essential requisites. The button types, the Caprice varieties, and Anemones, lend themselves well to this treatment. The stocky growth eliminates the need of staking, while the numerous branches thus produced abound with clusters of flowers.

CHRYSANTHEMUMS by ALEX LAURIE

Continued



POMPON GYPSY. A light reddish bronze that is ideal as a pot plant.

development should plants be permitted to become pot bound until after they reach their "finishing" pot. The soil used should be fully as rich as that advocated for bench stock. At least one-quarter by volume should consist of manure and peat, together with additions of superphosphate or a complete (4-12-4) fertilizer to the potting soil. Superphosphate (20%) may be mixed at the rate of a 4-inch potful to a bushel of soil and should be supplemented subsequently by applications of half a teaspoonful of ammonium sulphate to each pot above a 4-inch size. If the complete mixture is used in the potting soil, further additions may not be necessary between the shifts, but after the plants have been potted in their last pots, further additions of fertilizer may be made until the buds show color. In all cases the substance and vigor of the plant should indicate the necessity for fertilization.

A simpler method, reducing labor, is the potting directly from 2½-inch pots to the finishing pot, which may be a 5-inch or a 6-inch pot. True, more room is used but the quality is better and space is cheaper than labor. Care in watering until properly established is important.

The best method to produce bushy plants is by potting several cuttings in a 6- or 7-inch pan. Three plants may be set in a 5-inch or a 6-inch pan and five in a 7-inch pan. Potting soil should be low in nitrates and the plants kept on the dry side until thoroughly established. By proper pinching, symmetrical plants are produced without trouble.

Whichever method is used, the success in producing dwarf, bushy plants depends upon a consistent system of "pinching." The center of each shoot should be pinched out to induce other shoots to develop from the axillary bud and below. The operation is usually continued at weekly intervals until about August 15 for the early flowering, and September 1-10 for the late flowering kinds. The

disbudding of these potted plants is unnecessary, although it is sometimes practiced.

Another method in common usage is the setting out of plants from 2½-inch pots in frames or nursery rows where, under irrigation and proper cultivation, they assume large size. The chief drawbacks to this method are twofold. In the first place, their very size necessitates large pots in potting to accommodate the large mass of roots formed. If these are disturbed or cut off in the potting the foliage will wilt and many of the lower leaves may drop off. Secondly, there are such pests as tarnished plant bugs and leafhoppers which do much damage out of doors, where control is difficult. Tarnished plant bugs may produce so much blind wood that no flowering will take place.

Miniature pot plants may be secured by taking cuttings of flowering shoots in August, placing them in a propagating frame out of doors, and as soon as rooted, potting them individually in 3-inch pots. If desired, several may be potted in a 6-inch pan. These plants should be kept shaded and syringed frequently until they become thoroughly established.

Single stemmed chrysanthemums are also frequently grown in 6-inch pots. The best time to insert cuttings for this type of plant is June 1. Only the most sturdy of cuttings should be selected for this purpose. As soon as rooted, they should be potted firmly in 3-inch pots. Shading will be needed until proper establishment of the roots. This usually takes one week. The next shift is directly into 6-inch pots after a good root system has been developed in the 3-inch. For the second shift it is advisable to incorporate a complete commercial fertilizer in the soil, as recommended above. Firm potting is absolutely essential to induce a dwarf growth. After two or three weeks, additional feeding should be administered in the form of ammonium sulphate, applied either in dry or liquid form (½ teaspoonful per pot or 1 oz. to 2 gal. water). These applications should be made until the buds show color. Staking is necessary to keep the stems from breaking while the daily syringing is done. Bamboo stakes, green in color, are preferable for the purpose. Disbudding should be taken care of and all side and bottom growth removed. The crown bud is usually selected, although at times it may be necessary to wait until the terminals develop. This depends upon the variety and the earliness of the season.

Fig. 8. Bugs.



COMPLETE BUILDING INSTRUCTIONS FOR CLOTH HOUSES

Measure out a PERFECT RECTANGLE on the ground, each side of the rectangle being 33 feet if you plan a house 33 feet in width, or if larger, some multiple of 33 feet. Posts to be placed in the ground three feet deep, to carry the wires at positions that will line the wires in 16-feet-6-inch centers, in every direction.

If you plan a 33 feet wide house, it will require no inside posts; in a 66 feet width house you will need one row of posts inside, and in a 99 feet width house two rows of posts inside. IN ALL SIZE HOUSES BE CAREFUL THAT THE POSTS ARE PLACED TO CENTER THE SUPPORT WIRES EXACTLY 16 FEET 6 INCHES, so the top cloth made 33 feet widths with allowances will fit the frame.

Each outside post must be anchored rigidly with a dead man, and each corner post must have two dead men, one anchored against each side of the rectangle, dig a hole about three feet deep, six feet away from the post, take a 24-foot length of No. 8 galvanized wire, double it and loop one end around the post 6 feet 6 inches from the ground, attach the other end to the dead man and bury it, then twist the wire with a stick as in Fig. 9 until the post is in line; nail the 6-inch baseboard in position around the outside of the house. Place two 1½-inch staples six feet above the ground on each post so the No. 8 galvanized wires will pull through easily and use wire stretchers to stretch the wires taut. Stretch the wires from the corner posts only, as corner posts have two dead men, one anchored against each side of the rectangle, stretch the wires until they have the proper rigid tension and then drive the staples in fully to hold wires.

If you have inside posts they may be placed to hold the support wires and cloth 6¾ to 7 feet in height, giving more head room with the same width of cloth.

The cloth is rolled and folded and

will be easy to lay if care is taken to follow directions.

To cover the top unroll the cloth at one end of the frame and with several men lift it across the support wires, leaving about a yard hanging over the end wires so you can adjust it later; unfold a few yards lengthwise beside the frame, then take the selvage edge of the house top and the selvage edge of the sidewall and roll them together five times around the side wire, where you have surplus cloth on the ends wrap this around the wires and sew it, as it protects the cloth where the strain centers on the support wires. Pin the cloth in place with 8-penny wire nails, pin 10 or 15 feet before you begin to sew, stretch the cloth only enough to keep the sagging out and be sure to keep the lengthwise reinforcement woven lines at an even distance parallel with the length of the wire.

Start at the post and sew by whipping around the wire, using a tight lock stitch, so that the cloth will not slip; do not whip the thread along the wire more than 3 inches before lock stitching again. As you sew have the cloth pinned ahead of you 10 to 15 feet all the time. After this side is finished unfold the cloth to the other 33 feet side support wire and pin before sewing, making sure that the woven reinforced lines are at an even parallel distance from the support wire; sew ends with the same method. Only sew the cloth to support wires. Fasten the sidewalls to the baseboard with the new aluminum fasteners every 9 inches instead of using the old lath strip method, as this will prevent the cloth from rotting at the baseboard, from dampness.

A very good idea to prevent the cloth from chafing and wearing out the yarns is to cover the rough joints of the baseboard and also wrap the posts with either heavy paper or old cloth. Where wires are spliced cover them with some kind of wrapping.

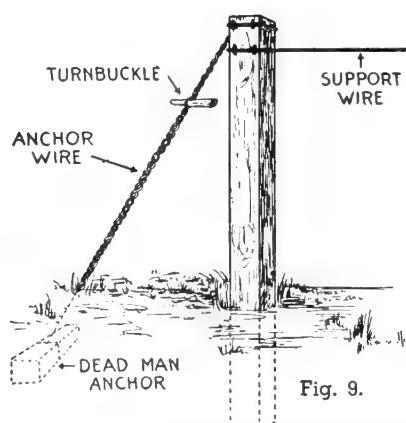


Fig. 9.

FLOWERING SCHEDULE
YELLOW—Poms, Singles and Anemones

Variety	Pinching Date	Shading Date	Flowering Date	
YELLOW IRENE	May 6	June 15	August 12	
YELLOW IRENE	May 13	June 22	August 19	
GOLDEN SPRAY	May 10	June 19	August 19	
YELLOW DOT	May 10	June 19	August 19	
YELLOW IRENE	May 20	June 29	August 26	
GOLDEN SPRAY	May 17	June 26	August 26	
YELLOW DOT	May 17	June 26	August 26	
GOLDEN HERALD	May 14	June 23	August 26	
YELLOW DAISY	May 14	June 23	August 26	
YELLOW ARCADIA	May 14	June 23	August 26	
YELLOW DOT	May 24	July 3	September 2	
GOLDEN HERALD	May 21	June 30	September 2	
YELLOW DAISY	May 21	June 30	September 2	
YELLOW ARCADIA	May 21	June 30	September 2	
BARCAROLE	May 17	June 26	September 2	
NUGGETS	May 17	June 26	September 2	
YELLOW BUSHNELL	May 17	June 26	September 2	
PIXIE	May 17	June 26	September 2	
YELLOW DOT	May 31	July 10	September 9	
GOLDEN HERALD	May 28	July 7	September 9	
YELLOW DAISY	May 28	July 7	September 9	
YELLOW ARCADIA	May 28	July 7	September 9	
BARCAROLE	May 24	July 3	September 9	
NUGGETS	May 24	July 3	September 9	
YELLOW BUSHNELL	May 24	July 3	September 9	
PIXIE	May 24	July 3	September 9	
YELLOW FELLOW	May 20	June 29	September 9	
GOLDEN HERALD	June 4	July 14	September 16	
YELLOW DAISY	June 4	July 14	September 16	
YELLOW ARCADIA	June 4	July 14	September 16	
BARCAROLE	May 31	July 10	September 16	
NUGGETS	May 31	July 10	September 16	
YELLOW BUSHNELL	May 31	July 10	September 16	
PIXIE	May 31	July 10	September 16	
YELLOW FELLOW	May 27	July 6	September 16	
GOLDEN SURPRISE	May 23	July 2	September 16	
PRINCETON	May 23	July 2	September 16	
GOLDEN HERALD	June 11	July 21	September 23	
YELLOW DAISY	June 11	July 21	September 23	
YELLOW ARCADIA	June 11	July 21	September 23	
BARCAROLE	June 7	July 17	September 23	
NUGGETS	June 7	July 17	September 23	
YELLOW BUSHNELL	June 7	July 17	September 23	
PIXIE	June 7	July 17	September 23	
YELLOW FELLOW	June 3	July 13	September 23	
GOLDEN SURPRISE	May 30	July 9	September 23	
PRINCETON	May 30	July 9	September 23	
BARCAROLE	June 14	July 24	September 30	
NUGGETS	June 14	July 24	September 30	
YELLOW BUSHNELL	June 14	July 24	September 30	
PIXIE	June 14	July 24	September 30	
YELLOW FELLOW	June 10	July 20	September 30	
GOLDEN SURPRISE	June 6	July 16	September 30	
PRINCETON	June 6	July 16	September 30	
GOLDSMITH	June 2	July 12	September 30	
LODESTAR	June 2	July 12	September 30	
GOLDEN JANE	June 2	July 12	September 30	
BARCAROLE	June 21	July 31	October 7	
NUGGETS	June 21	July 31	October 7	
YELLOW BUSHNELL	June 21	July 31	October 7	
PIXIE	June 21	July 31	October 7	
YELLOW FELLOW	June 17	July 27	October 7	
GOLDEN SURPRISE	June 13	July 23	October 7	
PRINCETON	June 13	July 23	October 7	
GOLDSMITH	June 9	July 19	October 7	
LODESTAR	June 9	July 19	October 7	
GOLDEN JANE	June 9	July 19	October 7	
BARCAROLE	June 28	Aug. 7	October 14	
NUGGETS	June 28	Aug. 7	October 14	
YELLOW BUSHNELL	June 28	Aug. 7	October 14	
PIXIE	June 28	Aug. 7	October 14	
YELLOW FELLOW	June 24	July 31	October 14	
GOLDEN SURPRISE	June 20	July 30	October 14	
PRINCETON	June 20	July 30	October 14	
GOLDSMITH	June 16	July 26	October 14	
LODESTAR	June 16	July 26	October 14	
GOLDEN JANE	June 16	July 26	October 14	
YELLOW IRENE	July 8	.....	October 15	
RODELL IMP.	July 8	.....	October 20	
YELLOW HAMMER	July 8	.....	October 20	
GOLDEN SPRAY	July 12	.....	October 23	
GOLDEN HERALD	July 12	.....	October 25	
YELLOW DOT	July 12	.....	October 25	
YELLOW ARCADIA	July 16	.....	October 28	
YELLOW SEA GULL	July 16	.....	November 1	
YELLOW DAISY	July 16	.....	November 1	
MARY L. HALL	July 16	.....	November 1	
BARCAROLE	July 19	.....	November 5	
NUGGETS	July 19	.....	November 5	
YELLOW BUSHNELL	July 19	.....	November 8	
PIXIE	July 19	.....	November 10	
PRINCETON	July 22	.....	November 15	
YELLOW FELLOW	July 22	.....	November 15	
SUSANNE MILLER	July 25	.....	November 18	
GOLDEN SURPRISE	July 25	.....	November 18	
GOLDEN EMBLEM	July 25	.....	November 23	
GOLDSMITH	July 28	.....	November 25	
SUNNYSIDE	July 28	.....	November 25	

FLOWERING SCHEDULE
YELLOW—Poms, Singles and Anemones (Continued)

Variety	Pinching Date	Shading Date	Flowering Date
LODESTAR	July 28	.....	November 25
GOLDEN JANE	July 28	.....	November 28
YELLOW CORDOVA	July 28	.....	November 30
YELLOW CAMEO	July 31	.....	December 5
DECEMBER GOLD	Aug. 2	.....	December 15
YELLOW GARZA	Aug. 2	.....	December 15
VIBRANT	Aug. 4	.....	December 20
YELLOW SNOW	Aug. 10	.....	December 30
IRENE	May 6	June 15	August 12
WHITE JEWELL	May 6	June 15	August 12
IRENE	May 13	June 22	August 19
WHITE JEWELL	May 13	June 22	August 19
PINOCCHIO	May 10	June 19	August 19
MINONG	May 10	June 19	August 19
IRENE	May 20	June 29	August 26
WHITE JEWELL	May 20	June 29	August 26
PINOCCHIO	May 17	June 26	August 26
MINONG	May 17	June 26	August 26
ARCADIA	May 14	June 23	August 26
IRENE	May 27	July 6	September 2
WHITE JEWELL	May 27	July 6	September 2
PINOCCHIO	May 24	July 3	September 2
MINONG	May 24	July 3	September 2
ARCADIA	May 21	June 30	September 2
SEA GULL	May 17	June 26	September 2
REV. BUSHNELL	May 17	June 26	September 2
IRENE	June 3	July 13	September 9
WHITE JEWELL	June 3	July 13	September 9
PINOCCHIO	May 31	July 10	September 9
MINONG	May 31	July 10	September 9
ARCADIA	May 28	July 7	September 9
SEA GULL	May 24	July 3	September 9
REV. BUSHNELL	May 24	July 3	September 9
VESPER	May 20	June 29	September 9
LITTLE AMERICA	May 20	June 29	September 9
PINOCCHIO	June 7	July 17	September 16
MINONG	June 7	July 17	September 16
ARCADIA	June 4	July 14	September 16
SEA GULL	May 31	July 10	September 16
REV. BUSHNELL	May 31	July 10	September 16
VESPER	May 27	July 6	September 16
LITTLE AMERICA	May 27	July 6	September 16
MATCHLESS	May 23	July 2	September 16
PRISCILLA	May 23	July 2	September 16
NEVADA	May 23	July 2	September 16
PINOCCHIO	June 14	July 24	September 23
ARCADIA	June 11	July 21	September 23
SEA GULL	June 7	July 17	September 23
REV. BUSHNELL	June 7	July 17	September 23
VESPER	June 3	July 13	September 23
LITTLE AMERICA	June 3	July 13	September 23
MATCHLESS	May 30	July 9	September 23
PRISCILLA	May 30	July 9	September 23
NEVADA	May 30	July 9	September 23
SEAFOAM	May 26	July 5	September 23
PINOCCHIO	June 21	July 31	September 30
ARCADIA	June 18	July 28	September 30
SEA GULL	June 14	July 24	September 30
REV. BUSHNELL	June 14	July 24	September 30
VESPER	June 10	July 20	September 30
LITTLE AMERICA	June 10	July 20	September 30
MATCHLESS	June 6	July 16	September 30
PRISCILLA	June 6	July 16	September 30
NEVADA	June 6	July 16	September 30
SEAFOAM	June 2	July 12	September 30
PINOCCHIO	June 28	Aug. 7	October 7
ARCADIA	June 25	Aug. 4	October 7
SEA GULL	June 21	July 31	October 7
REV. BUSHNELL	June 21	July 31	October 7
VESPER	June 17	July 27	October 7
LITTLE AMERICA	June 17	July 27	October 7
MATCHLESS	June 13	July 23	October 7
PRISCILLA	June 13	July 23	October 7
NEVADA	June 13	July 23	October 7
SEAFOAM	June 9	July 19	October 7
PINOCCHIO	July 4	Aug. 14	October 14
ARCADIA	July 2	Aug. 11	October 14
SEA GULL	June 28	Aug. 7	October 14
REV. BUSHNELL	June 28	Aug. 7	October 14
VESPER	June 24	Aug. 3	October 14
LITTLE AMERICA	June 24	Aug. 3	October 14
MATCHLESS	June 20	July 30	October 14
PRISCILLA	June 20	July 30	October 14
NEVADA	June 20	July 30	October 14
SEAFOAM	June 16	July 26	October 14
SILVER BALL	July 8	.....	October 15
WHITE JEWELL	July 8	.....	October 15
IRENE	July 8	.....	October 15
MINONG	July 12	.....	October 20
PINOCCHIO	July 12	.....	October 25
ARCADIA	July 16	.....	October 28
SEA GULL	July 16	.....	October 28
WHITE DOTY	July 16	.....	November 1
REV. BUSHNELL	July 19	.....	November 1
VESPER	July 19	.....	November 8

A.B.C. Special Wholesale Price List—Mums for 1946

FLOWERING SCHEDULE

WHITE—Poms, Singles and Anemones (Continued)

Variety	Pinching Date	Shading Date	Flowering Date
LITTLE AMERICA	July 19	.....	November 10
CHICAGO PEARL	July 22	.....	November 15
WHITE FREIDA	July 22	.....	November 15
NEVADA	July 25	.....	November 20
SEAFoAM	July 25	.....	November 20
MATCHLESS	July 25	.....	November 20
PRISCILLA	July 25	.....	November 23
CORDOVA	July 28	.....	November 30
CAMEO	July 31	.....	December 5
YUKON	Aug. 2	.....	December 10
GARZA SUPREME	Aug. 7	.....	December 15
SNOW	Aug. 7	.....	December 30
IVORY SNOW	Aug. 7	.....	December 30
REVELATION	Aug. 10	.....	December 30

BRONZE—Poms, Singles and Anemones

FIREBIRD	May 10	June 19	August 19
ADELAIDE	May 10	June 19	August 19
ROMAN BRONZE	May 10	June 19	August 19
FIREBIRD	May 17	June 26	August 26
ADELAIDE	May 17	June 26	August 26
ROMAN BRONZE	May 17	June 26	August 26
RED DAISY	May 14	June 23	August 26
FIREBIRD	May 24	July 3	September 2
ADELAIDE	May 24	July 3	September 2
ROMAN BRONZE	May 24	July 3	September 2
RED DAISY	May 21	June 30	September 2
NAVAHO	May 17	June 26	September 2
ROBIN HOOD	May 17	June 26	September 2
FIREBIRD	May 31	July 10	September 9
ADELAIDE	May 31	July 10	September 9
ROMAN BRONZE	May 31	July 10	September 9
RED DAISY	May 28	July 7	September 9
NAVAHO	May 24	July 3	September 9
ROBIN HOOD	May 24	July 3	September 9
BRONZE BULKELEY	May 24	July 3	September 9
SYLVANNA	May 20	June 29	September 9
CASSANDRA	May 20	June 23	September 9
FIREBIRD	June 7	July 17	September 16
ROMAN BRONZE	June 7	July 17	September 16
RED DAISY	June 4	July 14	September 16
NAVAHO	May 31	July 10	September 16
ROBIN HOOD	May 31	July 10	September 16
BRONZE BULKELEY	May 31	July 10	September 16
BRONZE MASTERPIECE	May 27	July 6	September 16
SYLVANNA	May 27	July 6	September 16
CASSANDRA	May 27	July 6	September 16
RED PRINCETON	May 23	July 2	September 16
RED DAISY	June 11	July 21	September 23
NAVAHO	June 7	July 17	September 23
ROBIN HOOD	June 7	July 17	September 23
BRONZE BULKELEY	June 7	July 17	September 23
BRONZE MASTERPIECE	June 3	July 13	September 23
SYLVANNA	June 3	July 13	September 23
CASSANDRA	June 3	July 13	September 23
RED PRINCETON	May 30	July 9	September 23
BRONZE GOLDSMITH	May 26	July 5	September 23
APRICOT VALENCIA	May 26	July 5	September 23
NAVAHO	June 14	July 24	September 30
ROBIN HOOD	June 14	July 24	September 30
BRONZE BULKELEY	June 14	July 24	September 30
BRONZE MASTERPIECE	June 10	July 20	September 30
SYLVANNA	June 10	July 20	September 30
CASSANDRA	June 10	July 20	September 30
RED PRINCETON	June 6	July 16	September 30
BITTERSWEET	June 6	July 16	September 30
BRONZE GOLDSMITH	June 2	July 12	September 30
APRICOT VALENCIA	June 2	July 12	September 30
NAVAHO	June 21	July 31	October 7
ROBIN HOOD	June 21	July 31	October 7
BRONZE BULKELEY	June 21	July 31	October 7
BRONZE MASTERPIECE	June 17	July 27	October 7
SYLVANNA	June 17	July 27	October 7
CASSANDRA	June 17	July 27	October 7
RED PRINCETON	June 13	July 23	October 7
BITTERSWEET	June 13	July 23	October 7
BRONZE GOLDSMITH	June 9	July 19	October 7
APRICOT VALENCIA	June 9	July 19	October 7
NAVAHO	June 28	Aug. 7	October 14
ROBIN HOOD	June 28	Aug. 7	October 14
BRONZE BULKELEY	June 28	Aug. 7	October 14
BRONZE MASTERPIECE	June 24	Aug. 3	October 14
SYLVANNA	June 24	Aug. 3	October 14
CASSANDRA	June 24	Aug. 3	October 14
RED PRINCETON	June 20	July 30	October 14
BITTERSWEET	June 20	July 30	October 14
BRONZE GOLDSMITH	June 16	July 26	October 14
APRICOT VALENCIA	June 16	July 26	October 14
ADELAIDE	July 12	.....	October 23
NATOMA	July 12	.....	October 25
FIREBIRD	July 12	.....	October 25
OCTOBER BRONZE	July 16	.....	October 28
ROBIN HOOD	July 19	.....	November 5
NAVAHO	July 19	.....	November 5
RED DAISY	July 19	.....	November 5
BRONZE BULKELEY	July 19	.....	November 8
BITTERSWEET	July 19	.....	November 8
SYLVANNA	July 19	.....	November 10

FLOWERING SCHEDULE

BRONZE—Poms, Singles and Anemones (Continued)

Variety	Pinching Date	Shading Date	Flowering Date
CASSANDRA	July 22	.....	November 10
TRIANON	July 22	.....	November 13
BRONZE MASTERPIECE	July 22	.....	November 15
RED PRINCETON	July 22	.....	November 15
LEGAL TENDER	July 25	.....	November 20
RUSTICON	July 25	.....	November 20
RED ROLINDA	July 25	.....	November 23
BRONZE GOLDSMITH	July 28	.....	November 25
YOLANDA	July 28	.....	November 25
ARGO	July 28	.....	November 28
APRICOT VALENCIA	July 28	.....	November 28
CARNELIA	July 28	.....	November 28
CRIMSON CARNELIA	July 28	.....	November 28
VIKING	July 31	.....	December 1
MAHOGANY VIKING	July 31	.....	December 1
CAVALCADE	Aug. 2	.....	December 10
SARONG	Aug. 4	.....	December 15

PINK—Poms, Singles and Anemones

PINK PEARL	May 6	June 15	August 12
JEWELL	May 6	June 15	August 12
DARK PINK JEWELL	May 6	June 15	August 12
PINK PEARL	May 13	June 22	August 19
JEWELL	May 13	June 22	August 19
DARK PINK JEWELL	May 13	June 22	August 19
CAPTAIN COOK	May 10	June 19	August 19
PINK DOT	May 10	June 19	August 19
JESSIE	May 10	June 19	August 19
PINK PEARL	May 20	June 29	August 26
JEWELL	May 20	June 29	August 26
DARK PINK JEWELL	May 20	June 29	August 26
CAPTAIN COOK	May 17	June 26	August 26
PINK DOT	May 17	June 26	August 26
JESSIE	May 17	June 26	August 26
OCTOBER PINK	May 14	June 23	August 26
PINK PEARL	May 27	July 6	September 2
JEWELL	May 27	July 6	September 2
DARK PINK JEWELL	May 27	July 6	September 2
CAPTAIN COOK	May 24	July 3	September 2
PINK DOT	May 24	July 3	September 2
JESSIE	May 24	July 3	September 2
OCTOBER PINK	May 21	June 30	September 2
MRS. BULKELEY	May 17	June 26	September 2
DARK PINK BULKELEY	May 17	June 26	September 2
PINK PEARL	June 3	July 13	September 9
JEWELL	June 3	July 13	September 9
DARK PINK JEWELL	June 3	July 13	September 9
CAPTAIN COOK	May 31	July 10	September 9
PINK DOT	May 31	July 10	September 9
JESSIE	May 31	July 10	September 9
OCTOBER PINK	May 28	July 7	September 9
MRS. BULKELEY	May 24	July 3	September 9
DARK PINK BULKELEY	May 24	July 3	September 9
MASTERPIECE	May 20	June 29	September 9
CAPTAIN COOK	June 7	July 17	September 16
PINK DOT	June 7	July 17	September 16
JESSIE	June 7	July 17	September 16
OCTOBER PINK	June 4	July 14	September 16
MRS. BULKELEY	May 31	July 10	September 16
DARK PINK BULKELEY	May 31	July 10	September 16
MASTERPIECE	May 27	July 6	September 16
CAPTAIN COOK	June 14	July 24	September 23
PINK DOT	June 14	July 24	September 23
JESSIE	June 14	July 24	September 23
OCTOBER PINK	June 11	July 21	September 23
MRS. BULKELEY	June 7	July 17	September 23
DARK PINK BULKELEY	June 7	July 17	September 23
MASTERPIECE	June 3	July 13	September 23
MINUET	May 26	July 5	September 23
DARK PINK VALENCIA	May 26	July 5	September 23
VALENCIA	May 26	July 5	September 23
CAPTAIN COOK	June 21	July 31	September 30
PINK DOT	June 21	July 31	September 30
JESSIE	June 21	July 31	September 30
OCTOBER PINK	June 18	July 28	September 30
MRS. BULKELEY	June 14	July 24	September 30
DARK PINK BULKELEY	June 14	July 24	September 30
MASTERPIECE	June 10	July 20	September 30
MINUET	June 2	July 12	September 30
DARK PINK VALENCIA	June 2	July 12	September 30
VALENCIA	June 2	July 12	September 30
CAPTAIN COOK	June 28	Aug. 7	October 7
PINK DOT	June 28	Aug. 7	October 7
JESSIE	June 28	Aug. 7	October 7
OCTOBER PINK	June 25	Aug. 4	October 7
MRS. BULKELEY	June 21	July 31	October 7
DARK PINK BULKELEY	June 21	July 31	October 7
MASTERPIECE	June 17	July 27	October 7
MINUET	June 9	July 19	October 7
DARK PINK VALENCIA	June 9	July 19	October 7
VALENCIA	June 9	July 19	October 7
CAPTAIN COOK	July 5	Aug. 14	October 14
PINK DOT	July 5	Aug. 14	October 14
JESSIE	July 5	Aug. 14	October 14
OCTOBER PINK	July 2	Aug. 11	October 14
MRS. BULKELEY	June 28	Aug. 7	October 14
DARK PINK BULKELEY	June 28	Aug. 7	October 14
MASTERPIECE	June 24	Aug. 3	October 14

FLOWERING SCHEDULE
PINK—Poms, Singles and Anemones (Continued)

Variety	Pinching Date	Shading Date	Flowering Date
MINUET	June 16	July 26	October 14
DARK PINK VALENCIA	June 16	July 26	October 14
VALENCIA	June 16	July 26	October 14
JEWELL	July 8	.....	October 15
DARK PINK JEWELL	July 8	.....	October 15
PINK PEARL	July 8	.....	October 20
CAPTAIN COOK	July 12	.....	October 23
JESSIE	July 12	.....	October 25
PINK DOT	July 12	.....	October 25
OCTOBER PINK	July 16	.....	October 28
LILLIAN DOTY	July 16	.....	November 1
MRS. BULKELEY	July 19	.....	November 8
DARK PINK BULKELEY	July 19	.....	November 8
THYRA	July 19	.....	November 10
MASTERPIECE	July 22	.....	November 15
FREIDA	July 22	.....	November 15
NORMA	July 25	.....	November 18
MINUET	July 28	.....	November 25
BEAUTIFUL LADY	July 28	.....	November 25
VALENCIA	July 28	.....	November 28
DARK PINK VALENCIA	July 28	.....	November 28
RIVIERA	Aug. 2	.....	December 10
CARILLON	Aug. 7	.....	December 15
ROSALIND	Aug. 7	.....	December 20

YELLOW—Standards

BLAZING GOLD	May 10	June 19	August 19
BLAZING GOLD	May 17	June 26	August 26
GOOD NEWS	May 14	June 23	August 26
BLAZING GOLD	May 24	July 3	September 2
GOOD NEWS	May 21	June 30	September 2
PENROD	May 17	June 26	September 2
BLAZING GOLD	May 31	July 10	September 9
GOOD NEWS	May 28	July 7	September 9
PENROD	May 24	July 3	September 9
BLAZING GOLD	June 7	July 17	September 16
GOOD NEWS	June 4	July 14	September 16
PENROD	May 31	July 10	September 16
YELLOW MEOF	May 23	July 2	September 16
GOOD NEWS	June 11	July 21	September 23
PENROD	June 7	July 17	September 23
YELLOW MEOF	May 30	July 9	September 23
MARIE DEPETRIS	May 26	July 5	September 23
GOOD NEWS	June 18	July 28	September 30
PENROD	June 14	July 24	September 30
YELLOW MEOF	June 6	July 16	September 30
MARIE DEPETRIS	June 2	July 12	September 30
GOOD NEWS	June 25	Aug. 4	October 7
PENROD	June 21	July 31	October 7
YELLOW MEOF	June 13	July 23	October 7
MARIE DEPETRIS	June 9	July 19	October 7
GOOD NEWS	July 2	Aug. 11	October 14
PENROD	June 28	Aug. 7	October 14
YELLOW MEOF	June 20	July 30	October 14
MARIE DEPETRIS	June 16	July 26	October 14
MRS. KIDDER	July 12	.....	October 20
BLAZING GOLD	July 12	.....	October 25
SUNGLOW	July 12	.....	October 25
CITRONELLA	July 16	.....	October 28
GOOD NEWS	July 16	.....	November 1
PENROD	July 19	.....	November 10
YELLOW MONUMENT	July 22	.....	November 15
YELLOW MEOF	July 25	.....	November 20
FRIENDLY RIVAL	July 25	.....	November 20
MARIE DEPETRIS	July 25	.....	November 23
HARVESTER	July 28	.....	November 25
GOLDEN PEARSON	July 28	.....	November 25
IMP. GOLDEN CHATTANOOGA	July 28	.....	November 25
GOLDEN MRS. ROSS	July 31	.....	December 3
METEORE	Aug. 2	.....	December 10
IMP. TOBIN'S LATE YELLOW	Aug. 4	.....	December 15

WHITE—Standards

SILVER SHEEN	May 10	June 19	August 19
SILVER SHEEN	May 17	June 26	August 26
ALBATROSS	May 14	June 23	August 26
BETSY ROSS	May 14	June 23	August 26
SILVER SHEEN	May 24	July 3	September 2
ALBATROSS	May 21	June 30	September 2
BETSY ROSS	May 21	June 30	September 2
INDIANAPOLIS WHITE	May 17	June 26	September 2
SILVER SHEEN	May 31	July 10	September 9
ALBATROSS	May 28	July 7	September 9
BETSY ROSS	May 28	July 7	September 9
INDIANAPOLIS WHITE	May 24	July 3	September 9
MONUMENT	May 20	June 29	September 9
SILVER SHEEN	June 7	July 17	September 16
ALBATROSS	June 4	July 14	September 16
BETSY ROSS	June 4	July 14	September 16
INDIANAPOLIS WHITE	May 31	July 10	September 16
MONUMENT	May 27	July 6	September 16
MEOF	May 23	July 2	September 16
ALBATROSS	June 11	July 21	September 23
BETSY ROSS	June 11	July 21	September 23

FLOWERING SCHEDULE
WHITE—Standards—(Continued)

Variety	Pinching Date	Shading Date	Flowering Date
INDIANAPOLIS WHITE	June 7	July 17	September 23
MONUMENT	June 3	July 13	September 23
MEOF	May 30	July 9	September 23
ALBATROSS	June 18	July 28	September 30
INDIANAPOLIS WHITE	June 14	July 24	September 30
MONUMENT	June 10	July 20	September 30
MEOF	June 6	July 16	September 30
ALBATROSS	June 25	Aug. 4	October 7
INDIANAPOLIS WHITE	June 21	July 31	October 7
MONUMENT	June 17	July 27	October 7
MEOF	June 13	July 23	October 7
ALBATROSS	July 2	Aug. 11	October 14
INDIANAPOLIS WHITE	June 28	Aug. 7	October 14
MONUMENT	June 24	Aug. 3	October 14
MEOF	June 20	July 30	October 14
SILVER SHEEN	July 12	.....	October 20
ALBATROSS	July 16	.....	November 1
SNOW WHITE	July 16	.....	November 1
BETSY ROSS	July 16	.....	November 1
INDIANAPOLIS WHITE	July 19	.....	November 8
MONUMENT	July 22	.....	November 15
MEOF	July 25	.....	November 18
CHATTANOOGA	July 28	.....	November 20
DECEMBER GLORY LARGE	July 31	.....	December 1
MARGARET MOELLER	July 31	.....	December 8
WHITE MISTLETOE	Aug. 2	.....	December 10
SMITH'S LATE WHITE	Aug. 4	.....	December 15

BRONZE—Standards

HILDA BERGEN	May 10	June 19	August 19
HILDA BERGEN	May 17	June 26	August 26
IVANHOE	May 14	June 23	August 26
DETROIT NEWS	May 14	June 23	August 26
HILDA BERGEN	May 24	July 3	September 2
IVANHOE	May 21	June 30	September 2
DETROIT NEWS	May 21	June 30	September 2
IND. BRONZE	May 17	June 26	September 2
HILDA BERGEN	May 31	July 10	September 9
IVANHOE	May 28	July 7	September 9
DETROIT NEWS	May 28	July 7	September 9
IND. BRONZE	May 24	July 3	September 9
ANACONDA	May 20	June 29	September 9
MRS. ROY	May 20	June 29	September 9
HILDA BERGEN	June 7	July 17	September 16
IVANHOE	June 4	July 14	September 16
DETROIT NEWS	June 4	July 14	September 16
IND. BRONZE	May 31	July 10	September 16
ANACONDA	May 27	July 6	September 16
MRS. ROY	May 27	July 6	September 16
IVANHOE	June 11	July 21	September 23
DETROIT NEWS	June 11	July 21	September 23
IND. BRONZE	June 7	July 17	September 23
ANACONDA	June 3	July 13	September 23
MRS. ROY	June 3	July 13	September 23
DETROIT NEWS	June 18	July 28	September 30
IND. BRONZE	June 14	July 24	September 30
ANACONDA	June 10	July 20	September 30
MRS. ROY	June 10	July 20	September 30
DETROIT NEWS	June 25	Aug. 4	October 7
IND. BRONZE	June 21	July 31	October 7
ANACONDA	June 17	July 27	October 7
MRS. ROY	June 17	July 27	October 7
DETROIT NEWS	July 2	Aug. 11	October 14
IND. BRONZE	June 28	Aug. 7	October 14
ANACONDA	June 24	Aug. 3	October 14
MRS. ROY	June 24	Aug. 3	October 14
DETROIT NEWS	July 9	Aug. 18	October 21
IND. BRONZE	July 5	Aug. 14	October 21
ANACONDA	July 1	Aug. 10	October 21
MRS. ROY	July 1	Aug. 10	October 21
HILDA BERGEN	July 12	.....	October 25
IVANHOE	July 16	.....	November 1
DETROIT NEWS	July 16	.....	November 1
IND. BRONZE	July 19	.....	November 8
BR. ORCHID QUEEN	July 19	.....	November 10
MRS. ROY	July 22	.....	November 15
GLADYS PEARSON	July 28	.....	November 25
OAK LEAF	July 28	.....	November 25

PINK—Standards

PINK CHIEF	May 13	June 22	August 19
PINK CHIEF	May 20	June 29	August 26
OCT. ROSE	May 17	June 26	August 26
MAJOR BOWES	May 17	June 26	August 26
J. W. PRINCE	May 14	June 23	August 26
PINK CHIEF	May 27	July 14	September 2
OCT. ROSE	May 24	July 3	September 2
MAJOR BOWES	May 24	July 3	September 2
J. W. PRINCE	May 21	June 30	September 2
IND. PINK	May 17	June 26	September 2
OCT. ROSE	May 31	July 10	September 9
MAJOR BOWES	May 31	July 10	September 9
J. W. PRINCE	May 28	July 7	September 9
IND. PINK	May 24	July 3	September 9

A.B.C. Special Wholesale Price List — Mums for 1946

FLOWERING SCHEDULE

PINK—Standards—(Continued)

Variety	Pinching Date	Shading Date	Flowering Date
OCT. ROSE	June 7	July 17	September 16
MAJOR BOWES	June 7	July 17	September 16
J. W. PRINCE	June 4	July 14	September 16
IND. PINK	May 31	July 10	September 16
ORCHID QUEEN	May 31	July 10	September 16
OCT. ROSE	June 14	July 24	September 23
J. W. PRINCE	June 11	July 21	September 23
IND. PINK	June 7	July 17	September 23
ORCHID QUEEN	June 7	July 17	September 23
EDWIN SEIDEWITZ	May 26	July 5	September 23
OCT. ROSE	June 21	July 31	September 30
J. W. PRINCE	June 17	July 27	September 30
IND. PINK	June 14	July 24	September 30
ORCHID QUEEN	June 14	July 24	September 30
EDWIN SEIDEWITZ	June 2	July 12	September 30
OCT. ROSE	June 28	Aug. 7	October 7
J. W. PRINCE	June 24	Aug. 3	October 7
IND. PINK	June 21	July 31	October 7
ORCHID QUEEN	June 21	July 31	October 7
EDWIN SEIDEWITZ	June 9	July 19	October 7
OCT. ROSE	July 4	Aug. 14	October 14
J. W. PRINCE	July 1	Aug. 10	October 14
IND. PINK	June 28	Aug. 7	October 14
ORCHID QUEEN	June 28	Aug. 7	October 14
EDWIN SEIDEWITZ	June 16	July 26	October 14
PINK CHIEF	July 8	.....	October 15
OCT. ROSE	July 12	.....	October 20
MAJOR BOWES	July 12	.....	October 20
J. W. PRINCE	July 16	.....	November 1
IND. PINK	July 19	.....	November 8
ORCHID QUEEN	July 19	.....	November 10
THANKS. PINK	July 25	.....	November 23
HELEN FRICK	July 28	.....	November 25
EDWIN SEIDEWITZ	July 28	.....	November 25

YELLOW—Pot Plants

Variety	Last Pinching Date	Shading Date	Flowering Date
GOLD LODGE	July 6	July 6	September 2
CELESTRA	July 6	July 6	September 2
BLAZING GOLD	July 3	July 3	September 2
MRS. KIDDER	July 3	July 3	September 2
GOLDEN GLORY	June 30	June 30	September 2
YELLOW BEAUTY	June 26	June 26	September 2
GOLD LODGE	July 13	July 13	September 9
CELESTRA	July 13	July 13	September 9
BLAZING GOLD	July 10	July 10	September 9
MRS. KIDDER	July 10	July 10	September 9
GOLDEN GLORY	July 7	July 7	September 9
YELLOW BEAUTY	July 3	July 3	September 9
BLAZING GOLD	July 17	July 17	September 16
MRS. KIDDER	July 17	July 17	September 16
GOLDEN GLORY	July 14	July 14	September 16
YELLOW BEAUTY	July 10	July 10	September 16
CARDONIA	July 10	July 10	September 16
PENROD	July 10	July 10	September 16
YELLOW BEAUTY	July 17	July 17	September 23
CARDONIA	July 17	July 17	September 23
PENROD	July 17	July 17	September 23
SUNRAY	July 13	July 13	September 23
BONNAFFON DELUXE	July 9	July 9	September 23
SUNGOLD	July 5	July 5	September 23
YELLOW BEAUTY	July 24	July 24	September 30
CARDONIA	July 24	July 24	September 30
PENROD	July 24	July 24	September 30
SUNRAY	July 20	July 20	September 30
BONNAFFON DELUXE	July 16	July 16	September 30
SUNGOLD	July 12	July 12	September 30
YELLOW BEAUTY	July 31	July 31	October 7
CARDONIA	July 31	July 31	October 7
PENROD	July 31	July 31	October 7
SUNRAY	July 27	July 27	October 7
BONNAFFON DELUXE	July 23	July 23	October 7
SUNGOLD	July 19	July 19	October 7
YELLOW BEAUTY	Aug. 7	Aug. 7	October 14
CARDONIA	Aug. 7	Aug. 7	October 14
PENROD	Aug. 7	Aug. 7	October 14
SUNRAY	Aug. 3	Aug. 3	October 14
BONNAFFON DELUXE	July 30	July 30	October 14
SUNGOLD	July 26	July 26	October 14
GOLD LODGE	Aug. 17	.....	October 15
CELESTRA	Aug. 17	.....	October 15
MRS. KIDDER	Aug. 21	.....	October 20
BLAZING GOLD	Aug. 21	.....	October 25
GOLDEN GLORY	Aug. 25	.....	November 1
YELLOW BEAUTY	Aug. 31	.....	November 10
PENROD	Aug. 31	.....	November 10
CARDONIA	Aug. 31	.....	November 10
SUNRAY	Aug. 31	.....	November 15
BONNAFFON DELUXE	Sept. 3	.....	November 20
FRIENDLY RIVAL	Sept. 3	.....	November 20
SUNGOLD	Sept. 6	.....	November 25
YELLOW CORDOVA	Sept. 6	.....	November 30
IMP. TOBIN'S YELLOW	Sept. 13	.....	December 15

FLOWERING SCHEDULE

WHITE—Pot Plants

Variety	Last Pinching Date	Shading Date	Flowering Date
CHRISTINA	July 3	July 3	September 2
GRANITE STATE	July 3	July 3	September 2
SNOW WHITE	June 30	June 30	September 2
RICHARD MANDEL	June 26	June 26	September 2
CHRISTINA	July 10	July 10	September 9
GRANITE STATE	July 10	July 10	September 9
SNOW WHITE	July 7	July 7	September 9
RICHARD MANDEL	July 3	July 3	September 9
LITTLE AMERICA	June 29	June 29	September 9
CHRISTINA	July 17	July 17	September 16
GRANITE STATE	July 17	July 17	September 16
SNOW WHITE	July 14	July 14	September 16
RICHARD MANDEL	July 10	July 10	September 16
LITTLE AMERICA	July 6	July 6	September 16
MARKETEER	July 2	July 2	September 16
GRANITE STATE	July 24	July 24	September 23
SNOW WHITE	July 21	July 21	September 23
RICHARD MANDEL	July 17	July 17	September 23
LITTLE AMERICA	July 13	July 13	September 23
MARKETEER	July 9	July 9	September 23
WHITE FRICK	July 5	July 5	September 23
GRANITE STATE	July 31	July 31	September 30
SNOW WHITE	July 28	July 28	September 30
RICHARD MANDEL	July 24	July 24	September 30
LITTLE AMERICA	July 20	July 20	September 30
MARKETEER	July 16	July 16	September 30
WHITE FRICK	July 12	July 12	September 30
GRANITE STATE	Aug. 7	Aug. 7	October 7
SNOW WHITE	Aug. 4	Aug. 4	October 7
RICHARD MANDEL	July 31	July 31	October 7
LITTLE AMERICA	July 27	July 27	October 7
MARKETEER	July 23	July 23	October 7
WHITE FRICK	July 19	July 19	October 7
GRANITE STATE	Aug. 14	Aug. 14	October 14
SNOW WHITE	Aug. 11	Aug. 11	October 14
RICHARD MANDEL	Aug. 7	Aug. 7	October 14
LITTLE AMERICA	Aug. 3	Aug. 3	October 14
MARKETEER	July 30	July 30	October 14
WHITE FRICK	July 26	July 26	October 14
WHITE JEWELL	Aug. 13	.....	October 15
CHRISTINA	Aug. 17	.....	October 20
GRANITE STATE	Aug. 21	.....	October 25
SNOW WHITE	Aug. 25	.....	November 1
LITTLE AMERICA	Aug. 31	.....	November 10
RICHARD MANDEL	Aug. 31	.....	November 10
MARKETEER	Sept. 3	.....	November 18
WHITE FRICK	Sept. 6	.....	November 25
WHITE YULETIDE	Sept. 6	.....	November 28
CORDOVA	Sept. 11	.....	November 30
MARGARET MOELLER	Sept. 13	.....	December 10
SMITH'S LATE WHITE	Sept. 13	.....	December 15

BRONZE—Pot Plants

Variety	Last Pinching Date	Shading Date	Flowering Date
ALAMEDA	June 30	June 30	September 2
GLITTERS	June 30	June 30	September 2
APRICOT QUEEN	June 30	June 30	September 2
IVANHOE	June 30	June 30	September 2
ALAMEDA	July 7	July 7	September 9
GLITTERS	July 7	July 7	September 9
APRICOT QUEEN	July 7	July 7	September 9
IVANHOE	July 7	July 7	September 9
ALAMEDA	July 14	July 14	September 16
GLITTERS	July 14	July 14	September 16
APRICOT QUEEN	July 14	July 14	September 16
IVANHOE	July 14	July 14	September 16
GYPSY	July 6	July 6	September 16
MRS. STAHELIN	July 6	July 6	September 16
APRICOT QUEEN	July 21	July 21	September 23
IVANHOE	July 21	July 21	September 23
GYPSY	July 13	July 13	September 23
MRS. STAHELIN	July 13	July 13	September 23
RED ROLINDA	July 9	July 9	September 23
BRONZE FRICK	July 5	July 5	September 23
APRICOT QUEEN	July 28	July 28	September 30
IVANHOE	July 28	July 28	September 30
GYPSY	July 20	July 20	September 30
MRS. STAHELIN	July 20	July 20	September 30
RED ROLINDA	July 16	July 16	September 30
BRONZE FRICK	July 12	July 12	September 30
APRICOT QUEEN	Aug. 4	Aug. 4	October 7
IVANHOE	Aug. 4	Aug. 4	October 7
GYPSY	July 27	July 27	October 7
MRS. STAHELIN	July 27	July 27	October 7
RED ROLINDA	July 23	July 23	October 7
BRONZE FRICK	July 19	July 19	October 7
APRICOT QUEEN	Aug. 11	Aug. 11	October 14
IVANHOE	Aug. 11	Aug. 11	October 14
GYPSY	Aug. 3	Aug. 3	October 14
MRS. STAHELIN	Aug. 3	Aug. 3	October 14
RED ROLINDA	July 30	July 30	October 14
BRONZE FRICK	July 26	July 26	October 14
ALAMEDA	Aug. 21	.....	October 25
GLITTERS	Aug. 25	.....	October 28
APRICOT QUEEN	Aug. 25	.....	November 1
IVANHOE	Aug. 25	.....	November 1
MELBA	Aug. 28	.....	November 10

FLOWERING SCHEDULE

BRONZE—Pot Plants—(Continued)

Variety	Last Pinching Date	Shading Date	Flowering Date
RED MELBA	Aug. 28	.....	November 10
GYPSY	Aug. 28	.....	November 15
BRONZE MASTERPIECE	Aug. 31	.....	November 15
MRS. STAHELIN	Aug. 31	.....	November 15
RED ROLINDA	Sept. 3	.....	November 20
BRONZE FRICK	Sept. 3	.....	November 25

PINK—Pot Plants

Variety	Last Pinching Date	Shading Date	Flowering Date
EARLY OCTOBER	July 6	July 6	September 2
JUSTRITE	July 6	July 6	September 2
ROSE CHOCARD	July 3	July 3	September 2
J. W. PRINCE	June 30	June 30	September 2
EARLY OCTOBER	July 13	July 13	September 9
JUSTRITE	July 13	July 13	September 9
ROSE CHOCARD	July 10	July 10	September 9
J. W. PRINCE	July 7	July 7	September 9
QUEEN OF PINKS	June 29	June 29	September 9
ROSE CHOCARD	July 17	July 17	September 16
J. W. PRINCE	July 14	July 14	September 16
ETHREELDA	July 10	July 10	September 16
QUEEN OF PINKS	July 6	July 6	September 16
THYRA	July 6	July 6	September 16
J. W. PRINCE	July 21	July 21	September 23
ETHREELDA	July 17	July 17	September 23
QUEEN OF PINKS	July 13	July 13	September 23
THYRA	July 13	July 13	September 23
BEAUTIFUL LADY	July 5	July 5	September 23
HELEN FRICK	July 5	July 5	September 23

FLOWERING SCHEDULE

PINK—Pot Plants—(Continued)

Variety	Last Pinching Date	Shading Date	Flowering Date
J. W. PRINCE	July 28	July 28	September 30
ETHREELDA	July 24	July 24	September 30
QUEEN OF PINKS	July 20	July 20	September 30
THYRA	July 20	July 20	September 30
BEAUTIFUL LADY	July 12	July 12	September 30
HELEN FRICK	July 12	July 12	September 30
J. W. PRINCE	Aug. 4	Aug. 4	October 7
ETHREELDA	July 31	July 31	October 7
QUEEN OF PINKS	July 27	July 27	October 7
THYRA	July 27	July 27	October 7
BEAUTIFUL LADY	July 19	July 19	October 7
HELEN FRICK	July 19	July 19	October 7
J. W. PRINCE	Aug. 11	Aug. 11	October 14
ETHREELDA	Aug. 7	Aug. 7	October 14
QUEEN OF PINKS	Aug. 3	Aug. 3	October 14
THYRA	Aug. 3	Aug. 3	October 14
BEAUTIFUL LADY	July 26	July 26	October 14
HELEN FRICK	July 26	July 26	October 14
EARLY OCTOBER	Aug. 13	.....	October 10
JUSTRITE	Aug. 17	.....	October 15
ROSE CHOCARD	Aug. 17	.....	October 20
J. W. PRINCE	Aug. 25	.....	November 1
THYRA	Aug. 28	.....	November 10
QUEEN OF PINKS	Aug. 28	.....	November 10
ETHREELDA	Aug. 31	.....	November 12
MASTERPIECE	Aug. 31	.....	November 15
HELEN FRICK	Sept. 6	.....	November 25
BEAUTIFUL LADY	Sept. 6	.....	November 25
RIVIERA	Sept. 11	.....	December 10

GET YOUR CUTTINGS OFF TO THE RIGHT START! plant them in A. B. C. "Easi-Off" WOOD PLANT BANDS



It is imperative that orders be placed NOW for Wood Plant Bands you will need next January, February or March. The reason: Next winter, when demand is strongest, it will be difficult or impossible to procure and dry the logs used in making these bands. Be sure of having the EXACT sizes needed by ordering now.

WOOD PLANT BANDS

CAT.	Size in inches	Weight per 1000	Per 1000
No. M-310	1 3/4 x 1 3/4 x 2 1/2	.12 lbs.	\$2.95
No. M-320	2 x 2 x 2 1/2	.15 lbs.	3.30
No. M-340	2 1/2 x 2 1/2 x 3	.20 lbs.	3.75
No. M-350	3 x 3 x 3	.21 lbs.	4.10
No. M-360	3 x 3 x 4	.32 lbs.	4.75
No. M-391	4 x 4 x 4	.40 lbs.	5.60

Packed 1000 to the carton. We do not break the cartons.

LIGHT WOOD FLATS

For handling and shipping our 1 3/4-inch and 2-inch sizes of Plant Bands.	Per 100
M-370; holds twelve 1 3/4-inch Bands	\$2.75
M-390; holds twelve 2-inch Bands	3.30
M-392; holds twelve 2 1/2-inch Bands	3.75
M-393; holds six 3-inch Bands	3.85
M-394; holds six 4-inch Bands	3.95

Packed 100 to the carton. We do not break cartons. Shipped promptly from the factory in Michigan.

Saves time and labor. Bands are removed without cutting; therefore, the dirt ball and roots are not disturbed. . . .

CLOTH FOR SHADING AND CLOTH HOUSES

We are offering cloth subject to our Factories being able to supply and to all Government Regulations. Protect your interests. SEND ORDER NOW—Will advise prices, when established.

AMOUNT OF STORM KING CLOTH REQUIRED TO COVER DIFFERENT SIZE STANDARD HOUSES

A little more cloth than the actual measurements of the frame, as additional material is needed for rolling around the wires and for slight variations in fitting the cloth to the frame when sewing.

STORM KING CLOTH	Sq. Yds.	Sq. Yds.	Total	STORM KING CLOTH	Sq. Yds.	Sq. Yds.	Total
for House	Required	Required	for House	for House	Required	Required	for House
Size or Houses	for House	for Number	Top	Size or Houses	for House	for Number	Top
33' x 33'	133	96	229	66' x 165'	1276	320	1596
33' x 66'	260	140	400	66' x 198'	1534	364	1898
33' x 99'	394	184	578	99' x 99'	1177	276	1453
33' x 132'	511	232	743	99' x 132'	1540	320	1860
66' x 66'	531	184	715	99' x 165'	1914	364	2278
66' x 99'	792	232	1024	99' x 198'	2298	408	2706
66' x 132'	1034	276	1310	132' x 132'	2046	364	2410

Weight of cloth approximately 13 lbs. per 100 square yards F. O. B. Factory.

The American Bulb Company, gives no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds (bulbs or plants) it sells and will not be responsible for the crop.

If the customer does not accept the goods on above terms he must return them at once, and money will be refunded or proper credit given. We exercise, however, the greatest care to fill our orders with the highest quality possible, as it is our constant aim to give our customers fullest satisfaction.

All goods are offered subject to crop failures, shortages or other causes beyond our control and to being unsold on receipt of order, and we reserve the right to advance prices without notice.

AMERICAN BULB COMPANY

31 W. 27th STREET

NEW YORK 1, N. Y.

CHRYSANTHEMUM CUTTING ORDER

ORDER NO. _____

Date 19

Ship To
NAME _____

c/o _____

(Please prefix Mr., Mrs. or Miss)

Street _____ P. O. Box _____

Post Office _____ R. F. D. No. _____

Freight or
Express Address _____

County _____ State _____

 EXACT DATE WANTED 19

Please DO NOT Write
in Space Above

Quan.	Variety	Price	Amt.	Quan.	Variety	Price	Amt.	Quan.	Variety	Price	Amt.
	Adelaide	37.50			Chattanooga	37.50			Glitters	37.50	
	Alameda	37.50			Chicago Pearl	37.50			Glow	37.50	
	Albatross	37.50			Christina	37.50			Gold Coin	37.50	
	Allegro	100.00			Christmas Cheer	37.50			Gold Imperial	50.00	
	Ambassador	37.50			Christmas Gold	37.50			Gold Lode	37.50	
	Anaconda	50.00			Chrome Emerald	37.50			Goldsmith	37.50	
	Apricon	37.50			Cincinnati	37.50			Golden Emblem	100.00	
	Apricot Queen	37.50			Citronella	37.50			Golden Glory	37.50	
	Apricot Valencia	50.00			Citrus Queen	37.50			Golden Herald	37.50	
	Arcadia	37.50			Clara Holford	37.50			Golden Jane	50.00	
	Argo	80.00			Clara Jameson	37.50			Golden Mistletoe	37.50	
	Aristocrat	100.00			Cocquette	80.00			Golden Modena	37.50	
	Avalanche	60.00			Cordova	37.50			Golden Mrs. Ross	37.50	
	Aviator	100.00			Crimson Carnelia	80.00			Golden October	37.50	
	Barbara Cumming	37.50			Crimson Glow	37.50			Golden Pearson	37.50	
	Barcarole	100.00			Crystal Jewell	37.50			Golden Spray	37.50	
	Beautiful Lady	37.50			Dk. Pk. Bulkeley	37.50			Golden Surprise	50.00	
	Betsy Ross	37.50			Dk. Pk. Freida	37.50			Good News	37.50	
	Bittersweet	100.00			Dk. Pk. Jewell	37.50			Graceland	37.50	
	Blanche	37.50			Dk. Pk. Norma	37.50			Granite State	100.00	
	Blazing Gold	37.50			Dk. Pk. Supreme	37.50			Gypsy	37.50	
	Bonnaffon Deluxe	37.50			Dk. Pk. Valencia	37.50			Harvard	37.50	
	Br. Buckingham	37.50			Dec. Glory—Large	37.50			Harvester	100.00	
	Br. Bulkeley	37.50			Dec. Gold	37.50			Has. Gold	37.50	
	Br. Daisy	37.50			Dec. White	80.00			Has. Pink	37.50	
	Br. Freida	37.50			Derigold	37.50			Helen Frick	37.50	
	Br. Frick	37.50			Detroit News	37.50			Helios	37.50	
	Br. Goldsmith	80.00			Dorothy Turner	37.50			Hilda Bergen	37.50	
	Br. Masterpiece	37.50			Early Bronze	37.50			Honey Dew	37.50	
	Br. Mistletoe	37.50			Early October	80.00			Imp. Dec. Beauty	37.50	
	Br. Orchid Queen	37.50			Early Wonder	37.50			Imp. Tobin's Yel.	37.50	
	Br. Supreme	37.50			Early Yellow	37.50			Imp. Yel. Chatt.	37.50	
	Burgundy	37.50			Ed. Seidewitz	37.50			Ind. Bronze	37.50	
	Caliph	37.50			Eliz. Peterson	37.50			Ind. Pink	37.50	
	Cambria	37.50			Enchantress	37.50			Ind. White	37.50	
	Cameo	37.50			Ethrelda	37.50			Indianola	37.50	
	Capt. Cook	37.50			Europa	37.50			Indian Summer	37.50	
	Cardonia	37.50			Fez	37.50			Irene	37.50	
	Carillon	37.50			Fire Bird	37.50			Ivanhoe	100.00	
	Carnelia	37.50			Freida	37.50			Ivory Snow	80.00	
	Cassandra	50.00			Friendly Rival	37.50			Jane	37.50	
	Catherine	37.50			Garnet King	37.50			Jean Cumming	37.50	
	Cavalcade	37.50			Garza Supreme	37.50			Jean Treadway	37.50	
	Celestra	37.50			Gladys Pearson	37.50			Jemima	37.50	

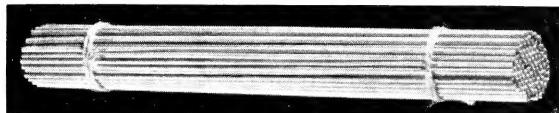
(OVER)

TOTAL THIS SIDE \$

Quan.	Variety	Price	Amt.	Quan.	Variety	Price	Amt.	Quan.	Variety	Price	Amt.
	BALANCE BROUGHT FWD.				Peter John	37.50			Sun Gold	37.50	
Jessie		37.50			Pink Chief	37.50			Sunnyside	50.00	
Jewell		37.50			Pink Dot	37.50			Sunray	37.50	
Judith Anderson		37.50			Pink Mistletoe	37.50			Susanne Miller	37.50	
Justrite		37.50			Pink Pearl	37.50			Sylvanna	80.00	
J. W. Prince		37.50			Pk. Treasure Is.	37.50			Symphony	37.50	
King Midas		37.50			Pink Turner	37.50			Thanks. Pink	37.50	
Lavender Lady		60.00			Pinocchio	100.00			The Titan	37.50	
Legal Tender		37.50			Pixie	50.00			Thorina	37.50	
Lillian Doty		37.50			Pom. Dec. Glory	37.50			Thyra	37.50	
Linda Lou		37.50			Pomponette	37.50			Trianon	80.00	
Little America		37.50			Princeton	37.50			Usona	37.50	
Lodestar		80.00			Priscilla	80.00			Uvalda	37.50	
L. I. Beauty		37.50			Prosperity	37.50			Valencia	37.50	
Mahogany Viking		80.00			Quaker Maid	37.50			Vesper	50.00	
Major Bowes		37.50			Queen of Pinks	37.50			Vibrant	37.50	
Mandarin		37.50			Red Daisy	37.50			Viking	37.50	
Margaret Moeller		100.00			Red Melba	37.50			Wh. Anemone	37.50	
Marie Depetris		37.50			Red Princeton	37.50			W. H. Buckingham	37.50	
Marketeer		37.50			Red Rolinda	37.50			Wh. Doty	37.50	
Mary L. Hall		37.50			Red Valencia	37.50			Wh. Freida	37.50	
Mason's Bronze		37.50			Red Velvet	80.00			Wh. Frick	37.50	
Mason's Red		37.50			Reliance	80.00			Wh. Jewell	37.50	
Masterpiece		37.50			Revelation	50.00			Wh. Mensa	37.50	
Matchless		100.00			Rev. Bushnell	37.50			Wh. Mistletoe	37.50	
Mefo		37.50			Richard Mandel	37.50			Wh. Norma	37.50	
Melba		37.50			Riviera	50.00			Wh. Supreme	37.50	
Meteore		80.00			Robin Hood	37.50			Wh. Yuletide	37.50	
Minong		37.50			Rodell Imp.	37.50			Whittier	37.50	
Minuet		80.00			Roman Bronze	37.50			Wildfire	37.50	
Mohawk Chief		37.50			Rosabella	37.50			Wm. Turner	37.50	
Monument		37.50			Rosalind	37.50			Winterset	37.50	
Morning Glow		100.00			Rose Charm	37.50			Wolverine	37.50	
Morning Star		100.00			Rose Chochard	37.50			Yel. Ambassador	37.50	
Mrs. Bulkeley		37.50			Rose Glow	37.50			Yel. Arcadia	37.50	
Mrs. Du Pont		60.00			Rosy Morn	80.00			Yel. Beauty	37.50	
Mrs. Hooker		37.50			Royal Crimson	37.50			Yel. Bushnell	37.50	
Mrs. Kidder		37.50			Royal Queen	37.50			Yel. Cameo	100.00	
Mrs. Roy		37.50			Ruby Pompon	80.00			Yel. Cordova	37.50	
Mrs. Stachelin		37.50			Rusticon	100.00			Yel. Daisy	37.50	
Nancy Crain		80.00			Ruth Cumming	37.50			Yel. Dot	37.50	
Natoma		37.50			Saratoga	37.50			Yel. Doty	37.50	
Navaho		50.00			Sarong	37.50			Yel. Fellow	37.50	
Nevada		80.00			Seafoam	50.00			Yel. Garza	37.50	
New York		37.50			Sea Gull	37.50			Yel. Hammer	37.50	
Norma		37.50			Shasta	37.50			Yel. Irene	37.50	
Normandie		37.50			Silver Ball	37.50			Yel. Mefo	37.50	
Nuggets		37.50			Silver Moon	37.50			Yel. Monument	37.50	
Oak Leaf		37.50			Silver Sheen	37.50			Yel. New York	37.50	
Oct. Bronze		37.50			Silver Star	37.50			Yel. Rolinda	37.50	
Oct. Pink		37.50			Sm. Early White	37.50			Yel. Sea Gull	37.50	
Oct. Rose		37.50			Sm. Late White	37.50			Yel. Snow	37.50	
Orchid Beauty		37.50			Snow	37.50			Yel. Supreme	37.50	
Orchid Queen		37.50			Snow White	37.50			Yel. Turner	37.50	
Pearl		37.50			Spun Gold	37.50			Yolanda	37.50	
Penrod		37.50			Sunglow	37.50			Yukon	37.50	

Remarks:

TOTAL \$.....

SUPPLIES FOR BETTER MUM-CULTURE**CANE STAKES****CANE STAKES—Domestic****GREEN—Pencil Thickness**

	Per 1,000	Per 500
1 ft.	\$ 5.50	\$ 3.25
1½ ft.	7.15	4.20
2 ft.	8.95	4.95
2½ ft.	11.75	6.50
3 ft.	13.15	7.15
3½ ft.	14.30	8.30
4 ft.	16.50	8.95
5 ft.	21.45	11.70
6 ft.	26.25	14.50

TONKIN STAKES—Bamboo

Many sizes and lengths for every purpose of staking and supporting Flowers, Plants and Young Trees—Green.

LIGHT WEIGHT SIZE

Packed 500 to the bale

Length Diameter

2 ft. $\frac{3}{8}$ " to $\frac{1}{2}$ "	Per bale of 500	\$ 6.45
2½ ft. $\frac{3}{8}$ " to $\frac{1}{2}$ "	Per bale of 500	8.00
3 ft. $\frac{3}{8}$ " to $\frac{1}{2}$ "	Per bale of 500	8.65
3½ ft. $\frac{3}{8}$ " to $\frac{1}{2}$ "	Per bale of 500	9.80
4 ft. $\frac{3}{8}$ " to $\frac{1}{2}$ "	Per bale of 500	10.45

HEAVY SIZE

Packed 500 to the bale.

Length Diameter

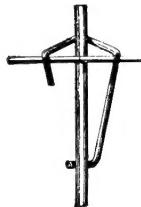
5 ft. $\frac{1}{2}$ " to $\frac{5}{8}$ "	Per 100	\$ 4.80
6 ft. $\frac{1}{2}$ " to $\frac{5}{8}$ "		5.30

STAKE FASTENERS**“Everlasting”**

Packed 500 to box. Wt. 2 lbs.

1 to 9 boxes. Each	\$1.35
10 boxes or more. Each	1.25

Constructed of heavy galvanized iron wire. Can be used with either steel stakes or bamboo stakes.

**PLANT TIES—“Lightning” Wire**

1000 to the box	
Per box	\$1.95
Shipping weight, per	

1000, 2 lbs.

INSECTICIDES

ARSENATE OF LEAD . . . The standard spray or dust for quick, dependable control of practically all leaf-eating (not sucking) insects.

1 lb. can	\$ 0.30
4 lb. bags	.75
100 lb. drums	14.00
Case of 12 4-lb. bags	7.20

Freight prepaid on case lots of 96 lbs. or more shipped from factory.

BAIT-M . . . with Metaldehyde. A double action insect bait. To control cutworms, sow bugs, grasshoppers and earwigs.

1 lb. pkg.	\$0.25
2½ lb. pkg.	.50

BALCK ARROW DUST No. 5000 . . . A non-poisonous pyrethrum dust, effective against any insects.

2 lbs.	\$ 0.80
10 lbs.	2.75
24 lbs.	5.75
50 lbs.	11.00

100 lbs. 21.00

Very effective and economical to use. Freight prepaid on 100 lbs., or more shipped from the factory.

BORDEAUX MIXTURE (Dry) . . . The best fungicide for curing and preventing black rot, mildew, blight, leaf curl, scab or other fungoid diseases on fruits and plants. One pound will make five gallons of liquid.

1 lb. cans	\$0.30
4 lb. bags	0.75

Case of 12 4-lb. bags

7.20

CALCIUM ARSENATE . . . (Dry) For potato beetle, cabbage and tomato worm, and most chewing insects. Full directions on container.

1-lb. cans	\$0.20
4-lb. bags	.70

Freight prepaid on 100 lb., or more shipped from the factory.

COPPER SULPHATE . . . (Blue Stone) Crystals.

10 lbs.	\$ 1.50
25 lbs.	3.25
100 lbs.	12.00

CORROSIVE SUBLIMATE . . . (Mercuric Chloride) . . . A very effective bulb disinfectant, especially prepared to control Gladiolus Thrips.

(Solution—4 oz. to 24 gal. water)	
1 lb. bottles	2.75

5 lb. bottles 13.50

(Solution—1 lb. to 96 gallons of water, or 1 to 750; 1 oz. to 6 gallons of water.)

CUPRINOL WOOD PRESERVATIVE . . . Stops rot around the greenhouse. One gallon covers and preserves approximately 400 sq. ft. of wood.

Gallon	\$2.90
5 gallon drums, per gallon	2.80

50 gallon drums, per gallon 2.70

CYANOGAS "G". (Calcium Cyanide) . . .

Greenhouse fumigant against aphids, white fly, thrips, soft scale and mealy bug and control for crop-destroying rodents.

5 lbs.	\$ 3.00
25 lb. drums	10.00

100 lb. drums 25.00

D. N. SULPHUR DUST No. 10 . . . A new and very effective control for red spider, thrips and rust diseases on carnations.

10 lb. bag	\$ 3.50
F.O.B. Chicago only	

Case of 5 bags, 50 lbs. 12.50

F.O.B. Factory only

HORMONES**Rootone**
PATENTS PENDING

A hormone powder for cutting, seeds and bulbs. Just dust and plant. No soaking or waiting is necessary as the work is done by the tiny amount of dry powder that adheres to the cutting, seed or bulb. Increases percentage of success in rooting cuttings. Breaks dormancy in seeds and bulbs, and gives stronger root systems and healthier plants. Tested by leading scientific institutions.

1/4-oz. pkg.—25c size.	Doz. pkgs.	\$2.00
2-oz. jars (up to 3,000 cuttings).	Each	1.00
For Resale.	Per dozen	8.00
1-lb. pkg. (up to 30,000 cuttings).	Each	5.00

Rootone No. 10

2½ times stronger than the standard.	
2-oz. jar.	Each
1-lb. can.	Each
Shipped fresh from the factory—PREPAID.	

TRANSPLANTONE

1-oz. cans	\$0.50	Doz. cans	\$4.00
1/2-oz. pkgs.	.25	Dozen	2.00
3-oz. cans	1.00	Doz. cans	8.00
1-lb. cans	Each		4.00

Post Paid

It contains the root forming hormones, Vitamin B₁, and other members of the Vitamin B Complex, which are important to plant growth.

FRUITONE

REG. U. S. PAT. OFF.

2 oz.	\$1.00	Doz.	\$ 8.00
12 oz.	5.00	6 for	21.00

Dilution: 2-oz. to each 25 gals. of water.

A description circular sent upon request.

HORMODIN "A"
TRADE MARK

25c size—24 on a card		\$4.00
Combination Package		.75

HORMODIN POWDER NO. 1

1 3/4-oz.	\$.50	Doz.	\$ 4.00
1-lb. tins	3.00	4 for	8.00

HORMODIN POWDER NO. 2

1 3/4-oz.	\$.75	Doz.	\$ 6.00
1-lb.	4.50	4 for	12.00

HORMODIN POWDER NO. 3

1-oz.	\$1.00	Doz.	\$ 8.00
1/2-lb.	4.50	4 for	12.00

All shipped post paid

Note: A descriptive pamphlet sent on request. Directions for using included with each package.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE



MATCHLESS

De Petris Introduction

Judged by present day standards this variety by all odds seems to be the best white pompon introduced to date. Large solid blooms of great substance, well placed on strong sprays. Stems are of ample length and are clean, straight and rigid. Growth is very free and robust. The variety breaks freely from pinches, the production being very good either in ground or raised benches. Normal blooming date November 20th to 22nd, ideal for Thanksgiving. Matchless shades well. Awarded Gold Medal 1943.

Price: \$100.00 Per Thousand Rooted Cuttings